Service
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Service Manual

Horizontal Frequency

30-80 kHz

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFOMER FOR THIS UNIT WHEN SERVICING

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.
Hereafter throughout this manual, AOC Company will be referred to as AOC.

WARNING
Use of substitute replacement parts, which do not have the same, specified safety characteristics might create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design.
Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:
DANGER-Invisible laser radiations when open AVOID DIRECT EXPOSURE TO BEAM.
CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.
Take care during handling the LCD module with backlight unit
-Must mount the module using mounting holes arranged in four corners.
-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
-Make certain that treatment person’s body is grounded through wristband.
-Do not leave the module in high temperature and in areas of high humidity for a long time.
-Avoid contact with water as it may a short circuit within the module.
-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

Revision List

Version	Date	Revision History	Remark
A00	May.-28-2010	Initial release	HKAASBNK6WA1PNE
			HKAASBNL6W3APNE
A01	Aug.-26-2010	Add new Models	HKAASBNK6WA3PNE
			HKAASBNK6WA2PNE

1. Monitor Specification

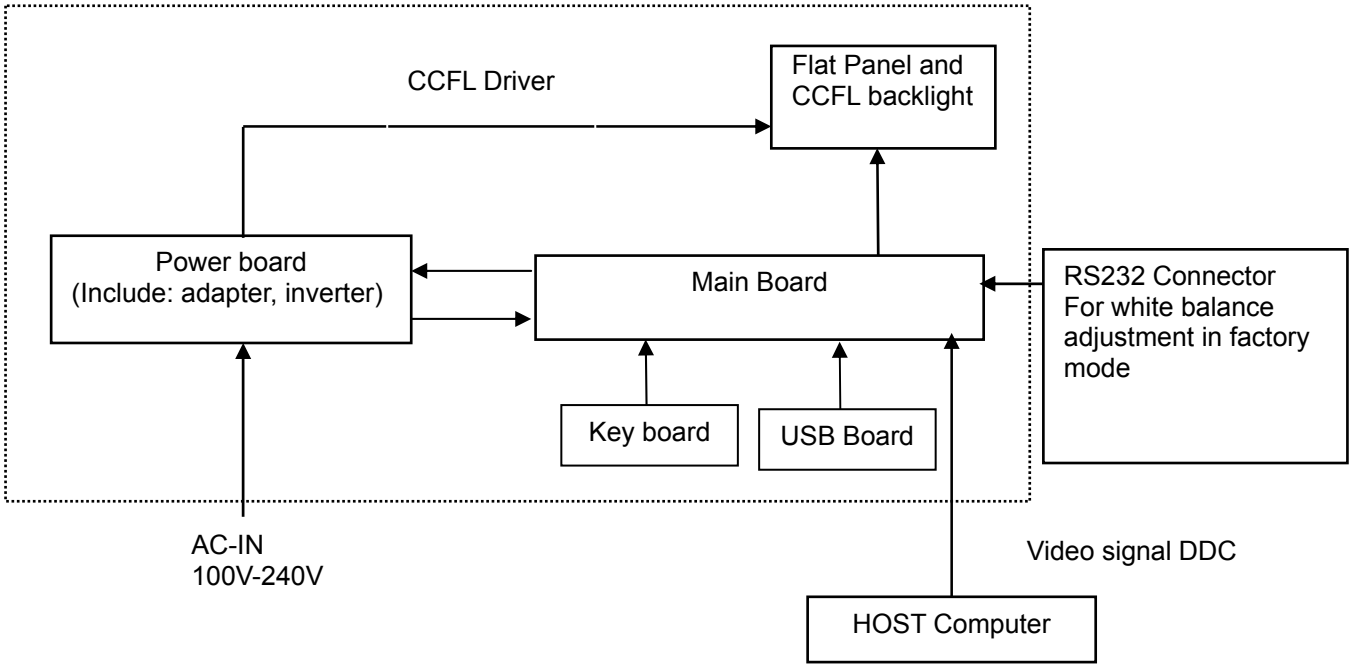
LCD Panel	Model name	2436Vh	
	Driving system	TFT Color LCD	
	Viewable Image Size	60.9 cm diagonal	
	Pixel pitch	0.2715mm(H) x 0.2715mm(V)	
	Video	R, G, B Analog Interface & HDMI	
	Separate Sync.	H/V TTL	
	Display Color	16.7M Colors	
	Dot Clock	148.5 MHz	
Resolution	Horizontal scan range	30 kHz - 80 kHz	
	Horizontal scan Size(Maximum)	521.28mm	
	Vertical scan range	55 Hz - 75 Hz	
	Vertical scan Size(Maximum)	298.89 mm	
	Optimal preset resolution	1920 x 1080 (60 Hz)	
	Highest preset resolution	1920 x 1080 (60 Hz)	
	Plug & Play	VESA DDC2B/CI	
	Input Connector	D-Sub 15pin & HDMI	
	Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM, HDMI	
	Power Source	100-240V~, 50/60Hz	
	Power Consumption	Typical < 49 W	
		Standby < 1 W	
	USB Downstream port (A type)	To USB device, loading < 100mA	
	off timer	0~24hours	Select timing to turn off the monitor.
	Speakers	2W x 2	
Physical Characteristics	Connector Type	15-pin Mini D-Sub & HDMI	
	Signal Cable Type	Detachable	
	Dimensions & Weight:	Height (with base)	425.47 mm
		Width	582.14mm
		Depth	206mm
		Weight (monitor only)	5.5 kg
		Weight (with packaging)	7.3 kg
Environmental	Temperature:	Operating	0° to 40°
		Non-Operating	-25°to 55°
	Humidity:	Operating	10% to 85% (non-condensing)
		Non-Operating	5% to 93% (non-condensing)
	Altitude:	Operating	0~ 12,000 ft (3,658m)
		Non-Operating	0~ 40,000 ft (12,192m)

2. LCD Monitor Description

The LCD MONITOR will contain a main board, a power board, an audio board and a key board which house the flat panel control logic, brightness control logic and DDC.

The power board will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.

Monitor Block Diagram



3. Operating Instructions

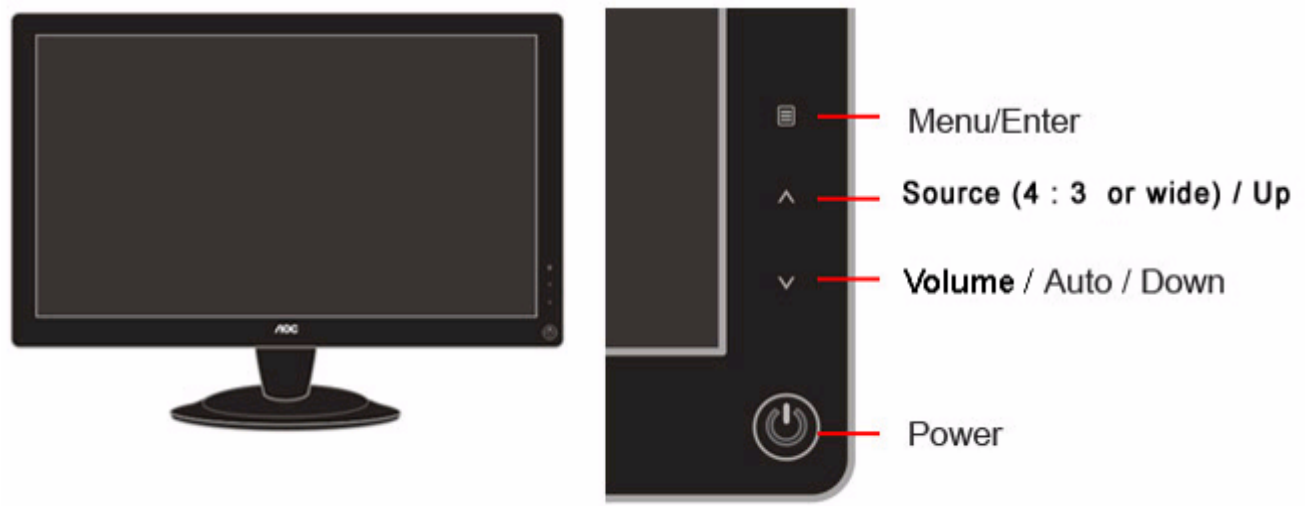
3.1 General Instructions

Press the power button to turn the monitor on or off. The other control buttons are located at front panel of the monitor.

By changing these settings, the picture can be adjusted to your personal preferences.

- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor, the power indicator will light up.

3.2 Control Buttons



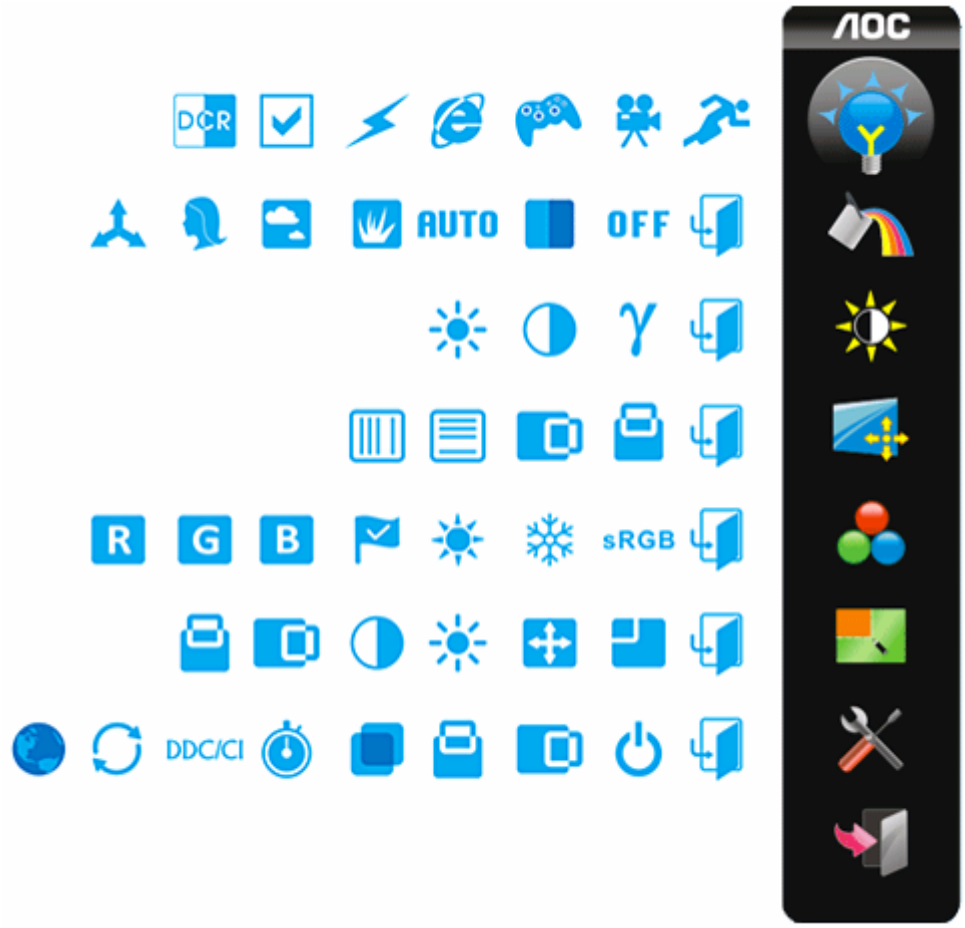
Power Press to turn on or turn off the monitor.

(4 : 3 or wide) / Up Press ^key to change the screen aspect ratio between standard 4:3 format or Wide format.

Source hot key : When the OSD is closed, press vbutton will be Source hot key function (Only for the models with dual or more inputs) .Press Source button continuously to select the input source showed in the message bar , press Menu/Enter button to change to the source selected.

Auto / Down Auto configure hot key: When the OSD is closed, press Auto button to do auto configure.

3.3 Adjusting the Picture



Eco mode ---DCR, Standard, Text, Internet, Game, Movie, Sports

Notes : When Eco mode is not set as “Standard”, Contrast and Brightness can not be adjusted; When DCR is set as “On”, Contrast, Brightness, Eco mode and Gamma can not be adjusted.

Color Boost --- Full Enhance, Nature Skin, Sky-Blue, Green Field, Auto Detect, Demo, Off, Exit

Notes :

Full Enhance: Total color saturation is enhanced, suitable for vivid pictures.

Natural Skin: Suitable for human portrait.

Green Field: Suitable for large area of green.

Sky Blue: Suitable for sky or ocean scene.

Auto Detect: Suitable for outdoor or garden.

Demo: Screen divided into two for comparison purpose.

Luminance ---Brightness,Contrast, Gamma

Notes : When Eco mode is not set as “Standard”, Contrast and Brightness can not be adjusted; When DCR is set as “On”, Contrast, Brightness, Eco mode and Gamma can not be adjusted.

Image Setup --- Clock, Phase, H.Position, V.Position, Exit

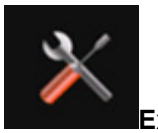
Notes : When the input source is digital signal like DVI or HDMI, Image Setup can not be adjusted.

Color Temperature ---User-R , User-G , User-B, Normal, Warm, Cool, sRGB, Exit

Notes :

One of DCR, Color Boost, and Picture Boost functions is active, the other two function is turned off accordingly.

Picture Boost --- V.Position, H.Position, Contrast, Brightness, Frame Size, Bright Frame, Exit

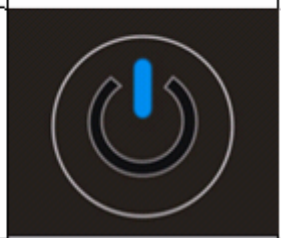
 **Extra ---Language, Reset, DDC-CI,OSD Timeout, Transparency, V. Position, H. Position, Off Timer,**

Notes :

One of DCR, Color Boost, and Picture Boost functions is active, the other two function is turned off accordingly.

Exit

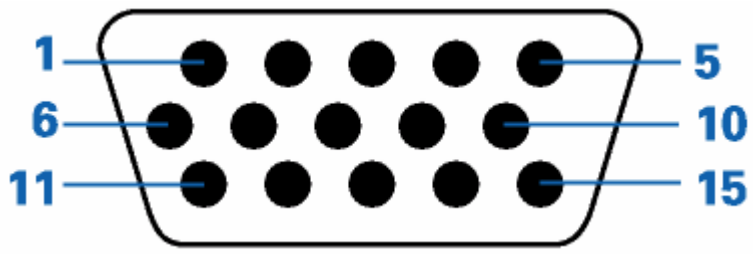
LED Indicator

Status	LED Color	
Full Power Mode	Blue	
Active-off Mode	Orange	

4. Input/Output Specification

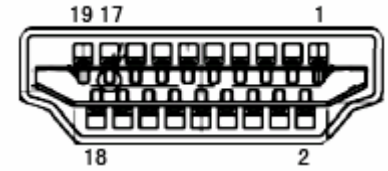
4.1 Input Signal Connector

4.1.1 D-SUB connector



PIN NO.	DESCRIPTION	PI N NO.	DESCRIPTION
1	Video-Red	9	+5V
2	Video-Green	10	Ground
3	Video-Blue	11	N.C.
4	N.C.	12	DDC-Serial data
5	Detect Cable	13	H-sync
6	GND-R	14	V-sync
7	GND-G	15	DDC-Serial clock
8	GND-B		

4.1.2 HDMI connector



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS Data 2+	9	TMDS Data 0	17	DDC/CEC Ground
2	TMDS Data 2 Shield	10	TMDS Clock +	18	+5V Power
3	TMDS Data 2	11	TMDS Clock Shield	19	Hot Plug Detect
4	TMDS Data 1+	12	TMDS Clock		
5	TMDS Data 1Shield	13	CEC		
6	TMDS Data 1	14	Reserved (N.C. on device		
7	TMDS Data 0+	15	SCL		
8	TMDS Data 0 Shield	16	SDA		

4.2 Factory Preset Display Modes

STAND	RESOLUTION	HORIZONTAL FREQUENCY(kHZ)	VERTICAL FREQUENCY(Hz)
VGA	640×480 @60Hz	31.469	59.94
VGA	640×480 @67Hz	35	66.667
VGA	640×480 @72Hz	37.861	72.809
VGA	640×480 @75Hz	37.5	75
Dos-mode	720×400 @70Hz	31.469	70.087
SVGA	800×600 @56Hz	35.156	56.25
SVGA	800×600 @60Hz	37.879	60.317
SVGA	800×600 @72Hz	48.077	72.188
SVGA	800×600 @75Hz	46.875	75
SVGA	832×624 @75Hz	49.725	74.55
XGA	1024×768 @60Hz	48.363	60.004
XGA	1024×768 @70Hz	56.476	70.069
XGA	1024×768 @75Hz	60.023	75.029
XGA	1024×768 @75Hz	60.241	74.927
***	1280×960 @60Hz	60	60
SXGA	1280×1024 @60Hz	63.981	60.02
SXGA	1280×1024 @75Hz	79.976	75.025
WXGA+	1440×900 @60Hz	55.935	59.887
WSXGA	1680X1050 @60Hz	65.29	59.954
HD	1920×1080@60Hz	67.5	60

5 Panel Specification

5.1 Display Characteristics

This specification applies to the 24 inch-wide Color a-Si TFT-LCD Module M240HW01.The display supports the Full HD - 1920(H) x 1080(V) screen format and 16.7M colors (RGB 6-bits + Hi-FRC data). All input signals are 2-channel LVDS interface and this module doesn't contain an inverter board for backlight.

Ta=25℃

ITEMS	Unit	SPECIFICATIONS
Screen Diagonal	[mm]	609.7(24.0")
Active Area	[mm]	531.36 (H) x 298.89 (V)
Pixels H x V		1920(x3) x 1080
Pixel Pitch	[um]	276.75 (per one triad) ×276.75
Pixel Arrangement		R.G.B. Vertical Stripe
Display Mode		TN Mode, Normally White
White Luminance (Center)	[cd/m^2]	300 cd/m^2 (Typ.)
Contrast Ratio		1000 (Typ.)
Optical Response Time	[msec]	5ms (Typ., on/off)
Nominal Input Voltage VDD	[Volt]	+5.0 V
Power Consumption (VDD line + CCFL line)	[Watt]	35 W (Typ.) (without inverter, all black pattern)
Weight	[g]	2755 (Typ.)
Physical Size	[mm]	556.0 (W) x 323.2 (H) x 16.35 (D) typ
Electrical Interface		Dual channel LVDS
Support Color		16.7M colors (RGB 6-bit + Hi_FRC)
Surface Treatment		Anti-Glare, 3H
Temperature Range		
Operating	[°C]	0 to +50
Storage (Shipping)	[°C]	-20 to +60
RoHS Compliance		RoHS Compliance

Use Only 2009/4/16

5.2 Optical Characteristics

Ta=25℃

Item	Unit	Conditions	Min.	Typ.	Max.
Viewing Angle	[degree]	Horizontal (Right) CR = 10 (Left)	150	170	- -
		Vertical (Up) CR = 10 (Down)	140	160	- -
Contrast ratio		Normal Direction	600	1000	-
Response Time	[msec]	Raising Time (T_{rR})	-	3.5	7.5
		Falling Time (T_{rF})	-	1.5	2.5
		Raising + Falling	-	5	10
Color / Chromaticity Coordinates (CIE)		Red x	0.619	0.649	0.679
		Red y	0.308	0.338	0.368
		Green x	0.259	0.289	0.319
		Green y	0.579	0.609	0.639
		Blue x	0.116	0.146	0.176
		Blue y	0.040	0.070	0.100
Color Coordinates (CIE) White		White x	0.283	0.313	0.343
		White y	0.299	0.329	0.359
Central Luminance	[cd/m^2]		250	300	-
Luminance Uniformity	[%]		75	80	-
Crosstalk (in 60Hz)	[%]				1.5

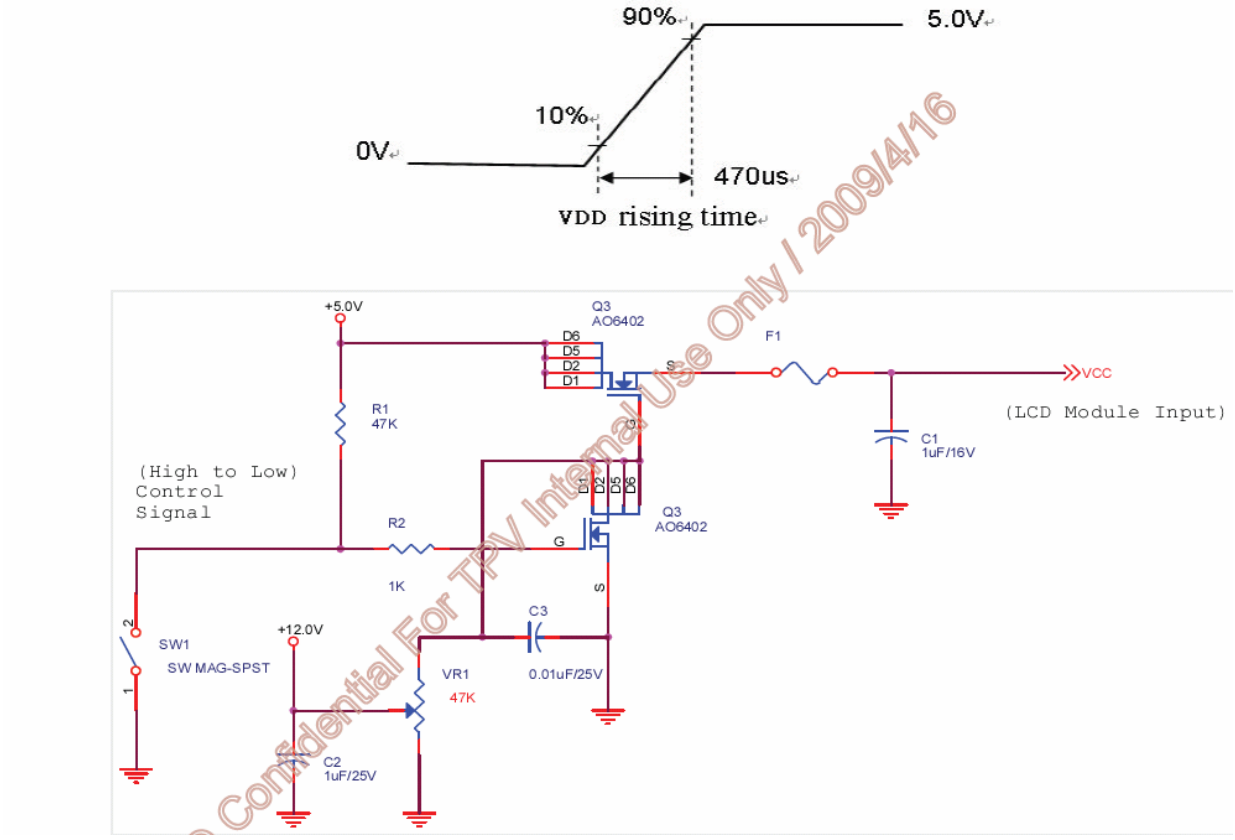
5.3 Electrical Characteristics

1.TFT LCD Module:

Symbol	Parameter	Min	Typ	Max	Unit	Conditions
VDD	Logic/LCD Drive Voltage	4.5	5.0	5.5	[Volt]	+/-10%
IDD1	Input Current	-	0.6	1.2	[A]	VDD= 5.0V,All black Pattern, At 60Hz
PDD1	VDD Power	-	3	6	[Watt]	VDD= 5.0V,All black Pattern, At 60Hz
IRush	Inrush Current	-	-	3	[A]	**Note 1**
VDDrp	Allowable Logic/LCD Drive Ripple Voltage	-	-	100	[mV] p-p	VDD= 5.0V, All Black Pattern At 75Hz

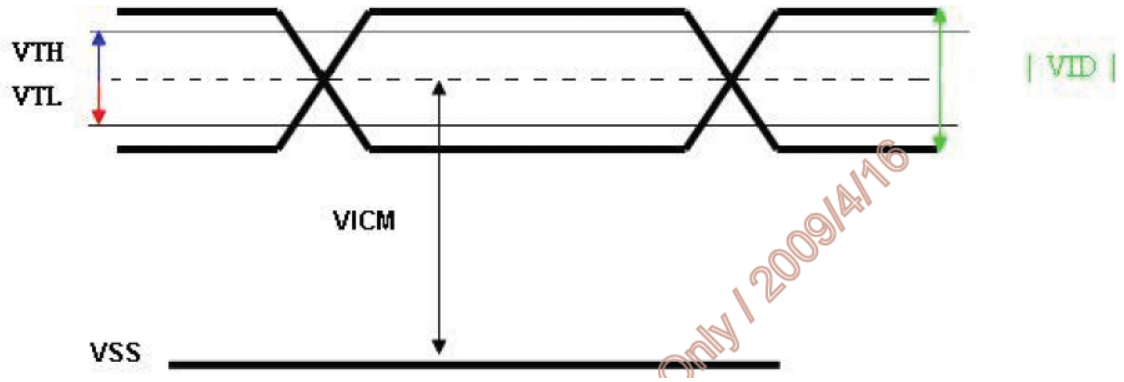
Note 1： Measurement conditions:

The duration of rising time of power input is 470 us:



Symbol	Parameter	Min	Typ	Max	Units	Condition
VTH	Differential Input High Threshold	-	+50	+100	[mV]	VICM = 1.2V ***Note 1***
VTL	Differential Input Low Threshold	-100	-50	-	[mV]	VICM = 1.2V ***Note 1***
| VID |	Input Differential Voltage	100	-	600	[mV]	***Note 1***
VICM	Differential Input Common Mode Voltage	+1.0	+1.2	+1.5	[V]	VTH-VTL = 200MV (max) ***Note 1***

Note 1: LVDS Signal Waveform



Only for 2009/4/16

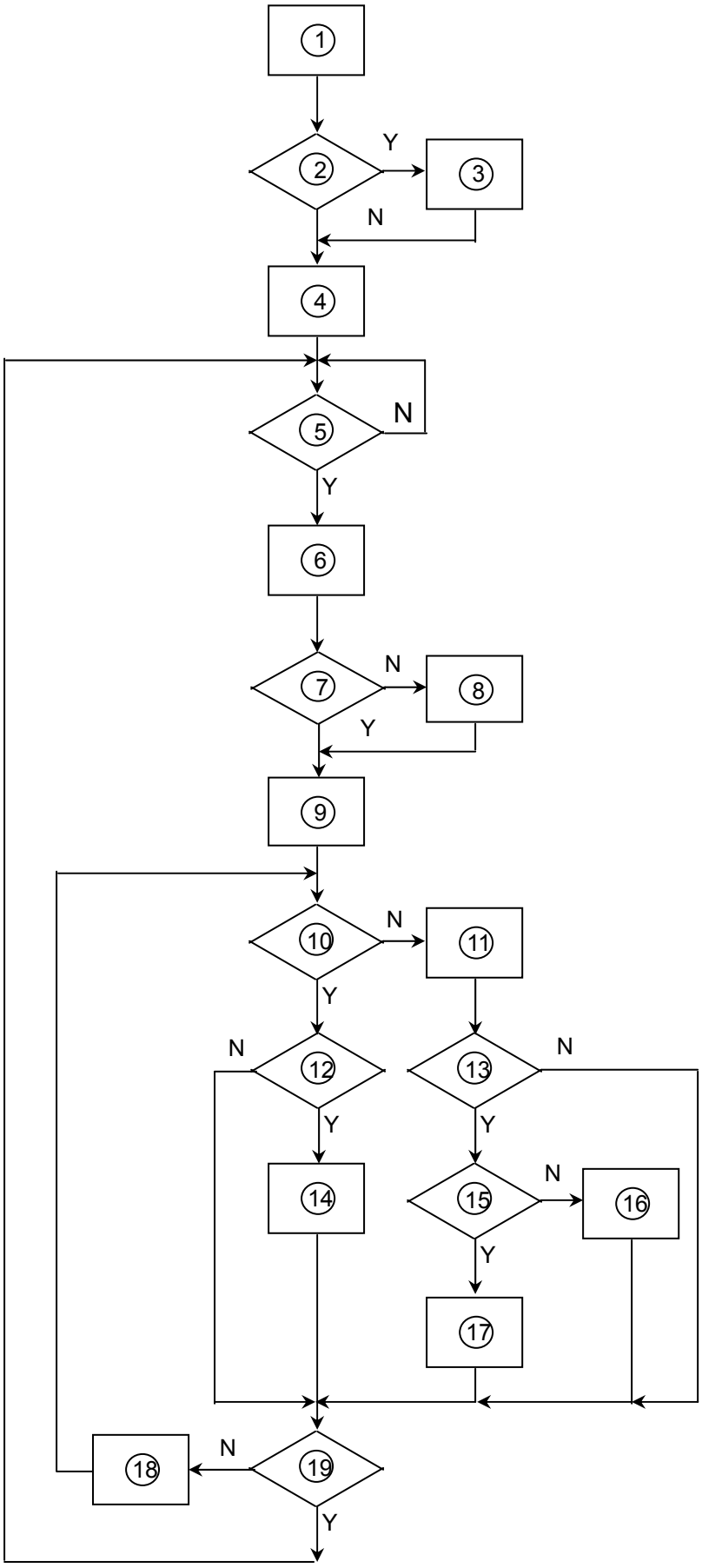
2.Back Light Unit:

Ta=25℃

Parameter	Min.	Typ.	Max.	Unit
CCFL Standard Current (ISCFL)	7.0	7.5	8.0	[mA] rms
CCFL Operation Current (IRCFL)	3.0	7.5	8.0	[mA] rms
CCFL Frequency (FCFL)	40	53	60	[KHz]
CCFL Ignition Voltage (ViCFL, Ta= 0℃)	2000	-	-	[Volt] rms
CCFL Ignition Voltage (ViCF, Ta= 25℃)	1850	-	-	[Volt] rms
CCFL Operation Voltage (VCFL)	-	900 (@7.5mA)	-	[Volt] rms
CCFL Power Consumption (PCFL)	-	27	-	[Watt]
CCFL Life Time (LTCFL)	40,000	50,000	-	[Hour]

6. Block Diagram

6.1 Software Flow Chart

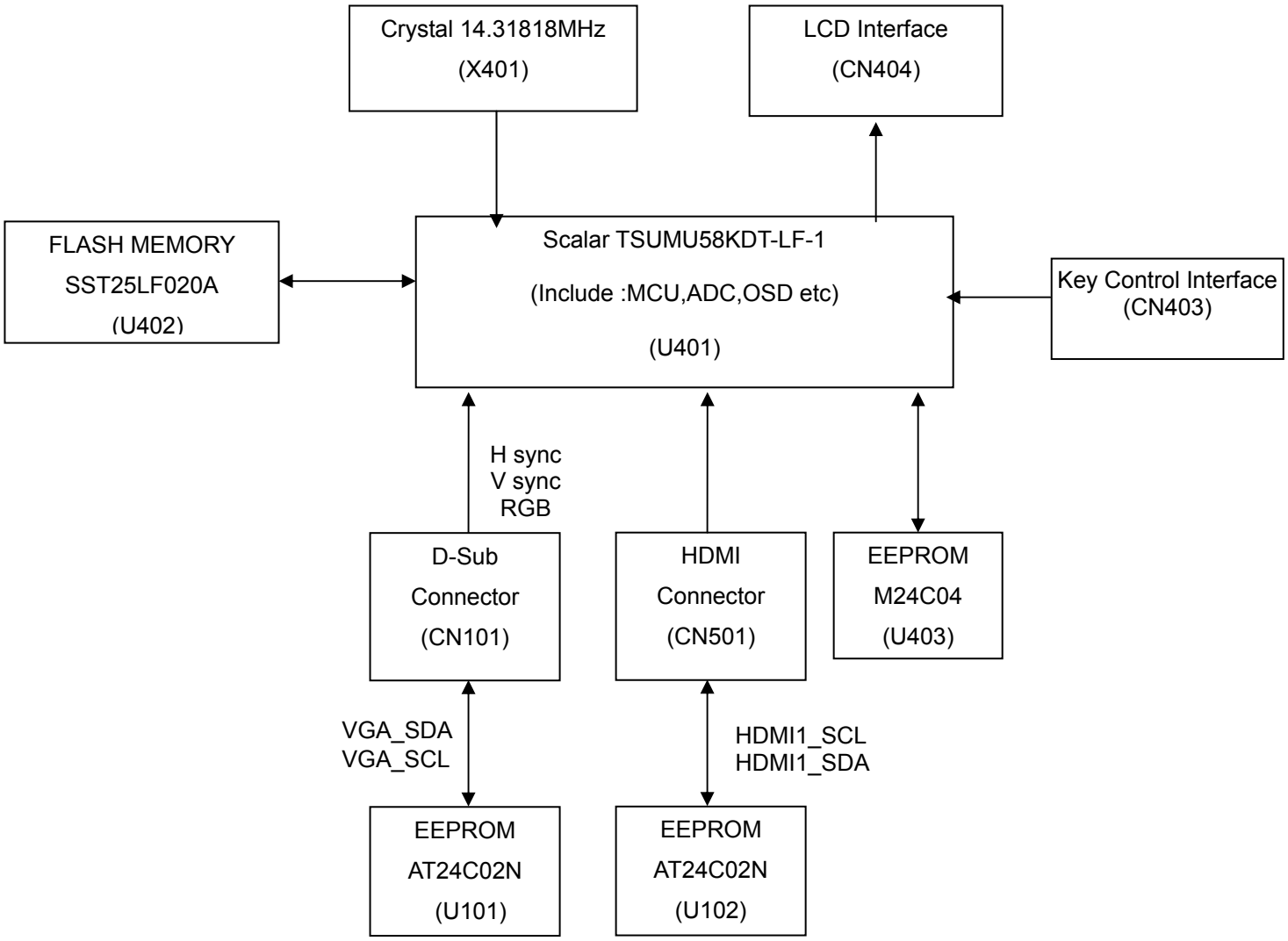


REMARK:

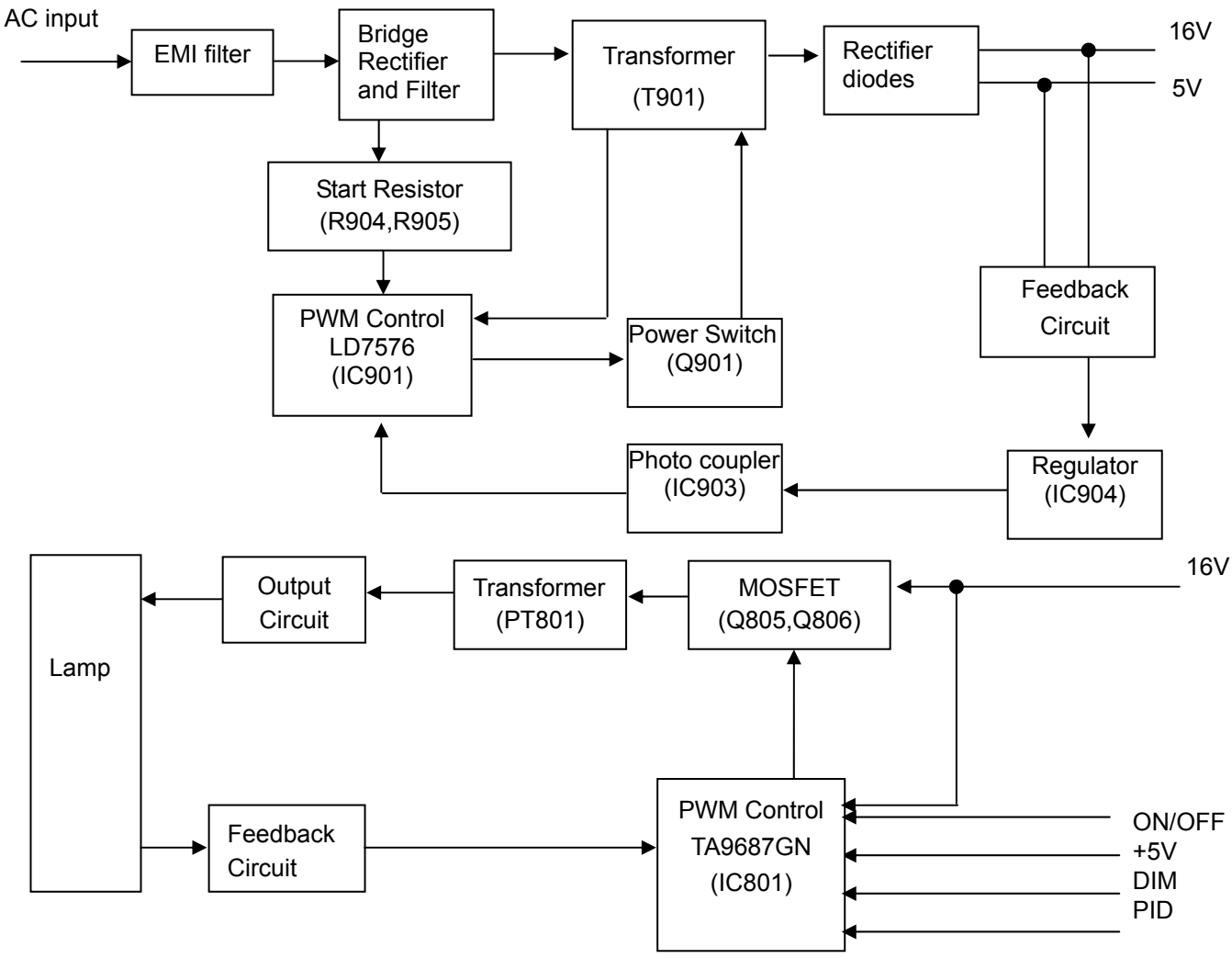
1) MCU initialize.
2) Is the EEprom blank?
3) Program the EEprom by default values.
4) Get the PWM value of brightness from EEprom.
5) Is the power key pressed?
6) Clear all global flags.
7) Are the AUTO and SELECT keys pressed?
8) Enter factory mode.
9) Save the power key status into EEprom.Turn on the LED and set it to green color. Scalar initialize.
10) In standby mode?
11) Update the lifetime of back light.
12) Check the analog port, are they’re any signals coming?
13) Does the scalar send out an interrupt request?
14) Wake up the scalar.
15) Are there any signals coming from analog port?
16) Display "No connection Check Signal Cable" message. And go into standby mode after the message disappear.
17) Program the scalar to be able to show the coming mode.
18) Process the OSD display.
19) Read the keyboard. Is the power key pressed?

6.2 Electrical Block Diagram

6.2.1 Scalar Board



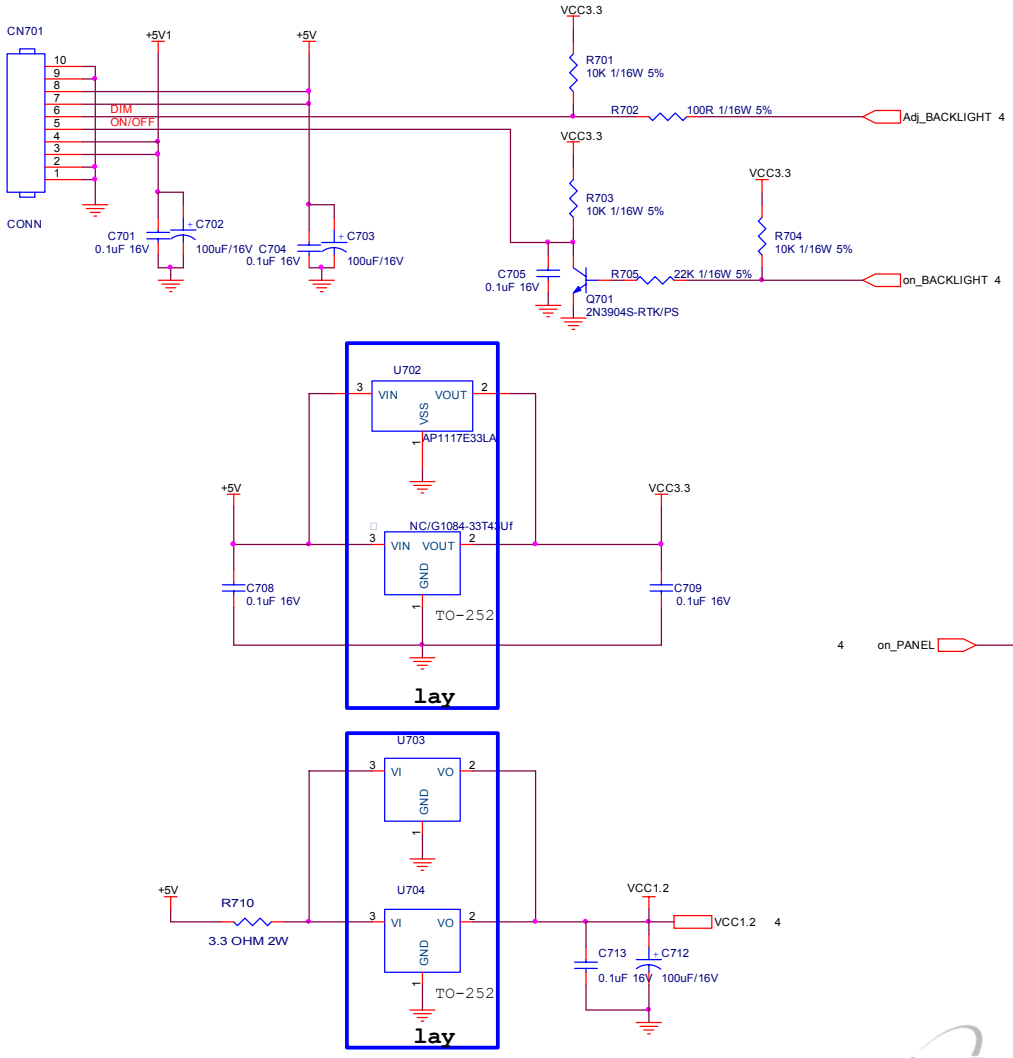
6.2.2 Inverter / Power Board



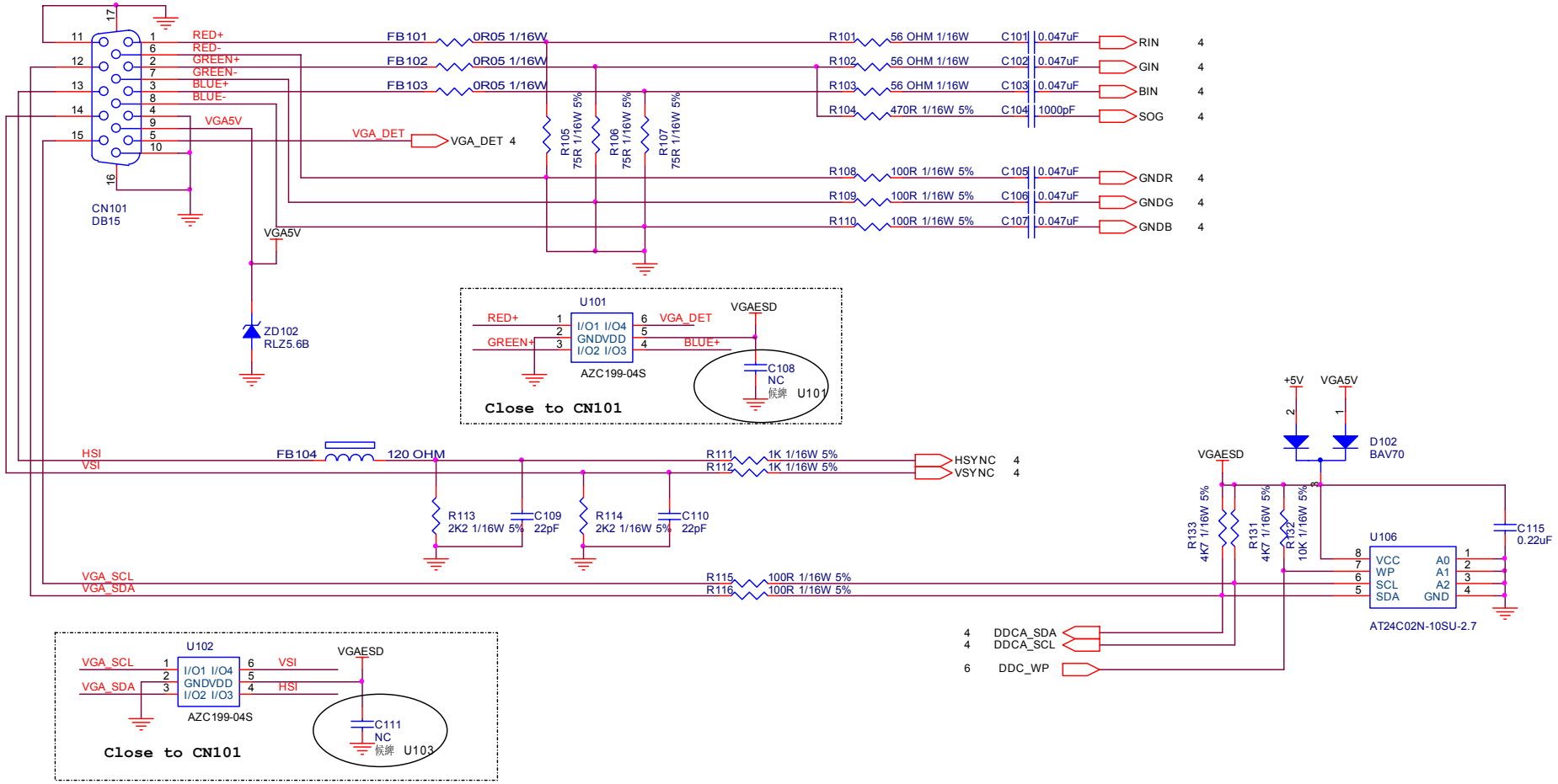
7. Schematic

7.1 Main Board

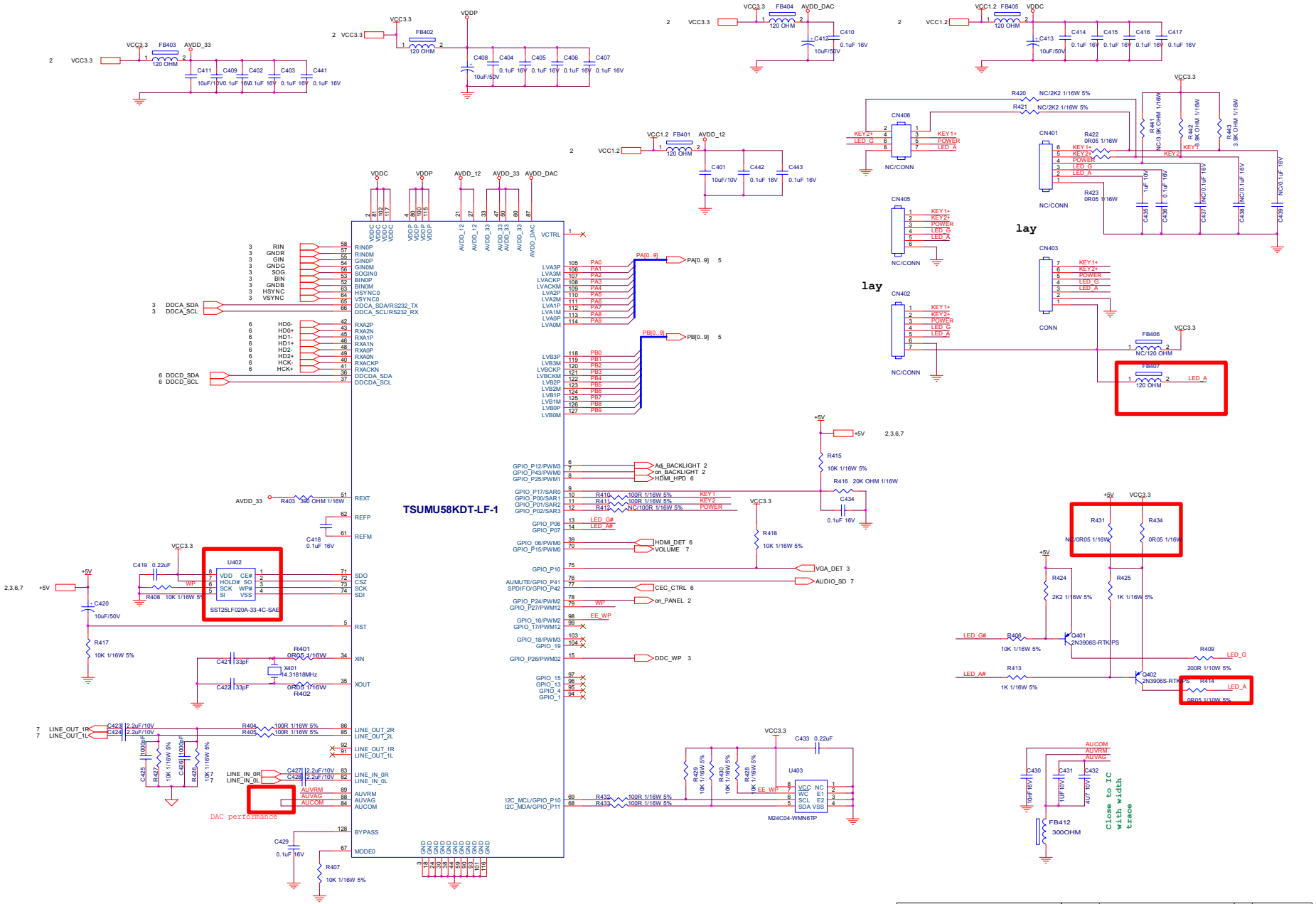
715G3262 2



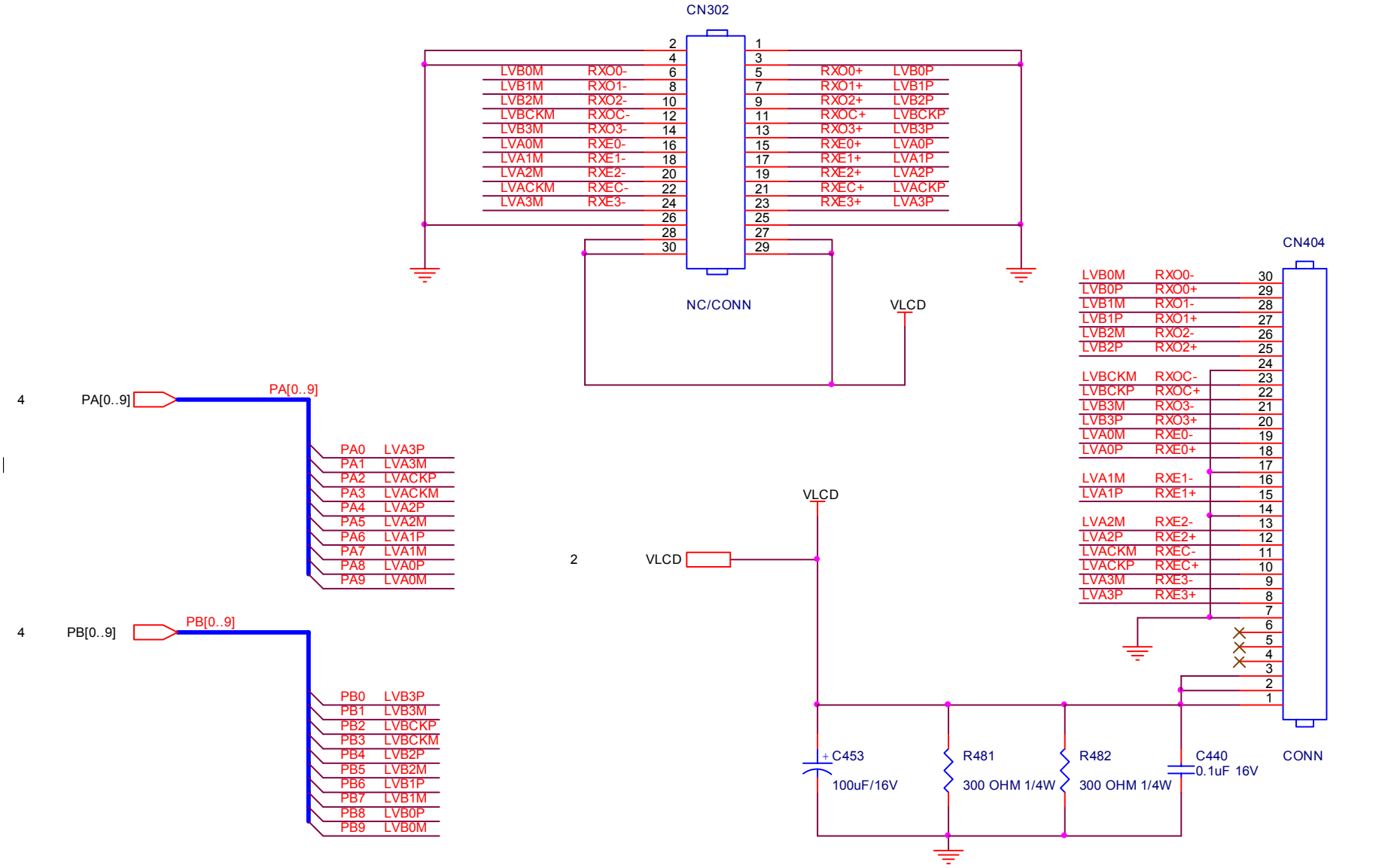
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	B
結隔瓜鋼腹	G3262-2-X-X-1-090401	TPV MODEL	2436vwh	Rev	E
Key Component	2.0.POWER	PCB NAME	715G3262-2	称爹	<称爹>
Date	Thursday, June 11, 2009	Sheet	2 of 7		



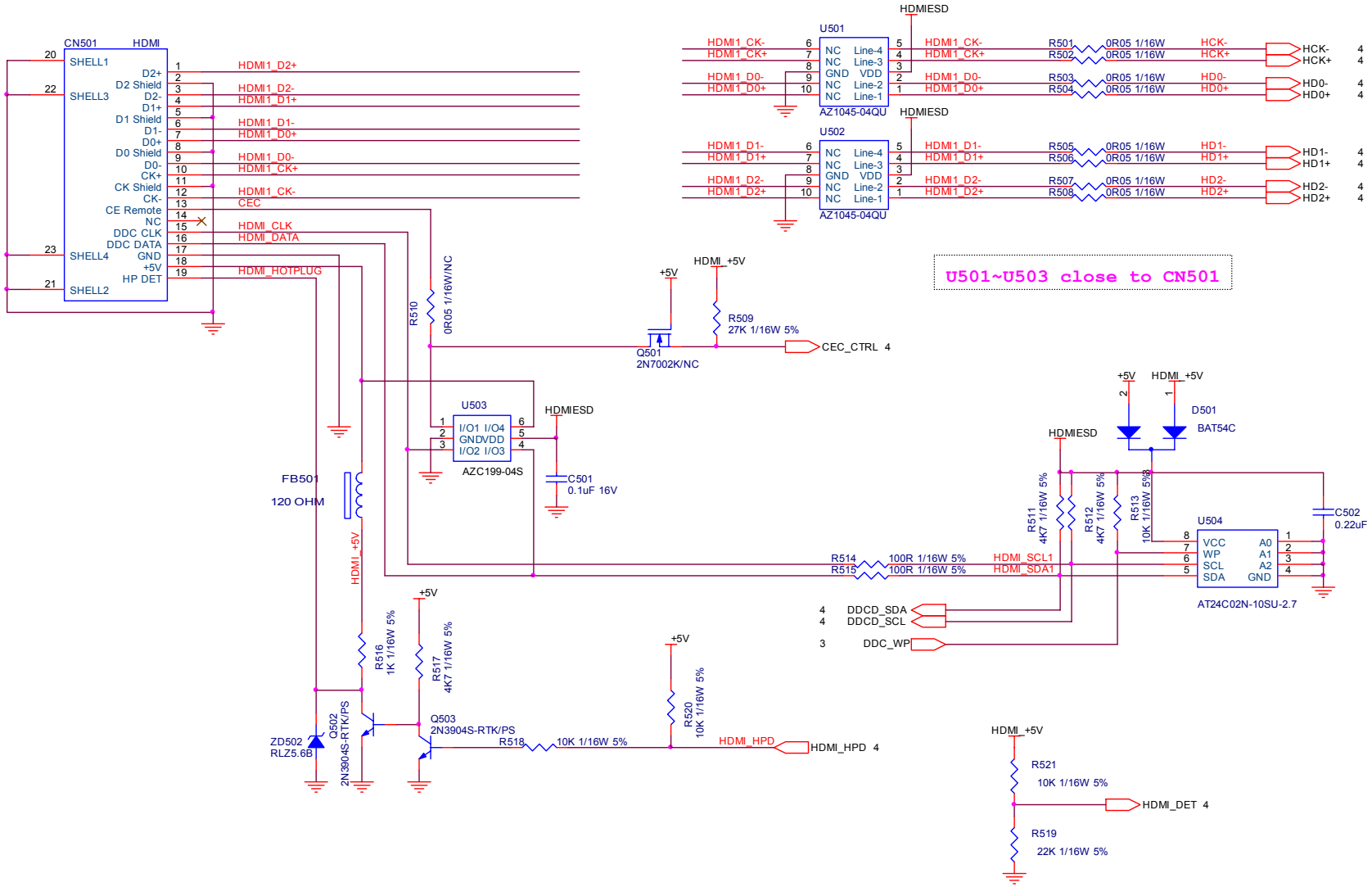
T P V (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	B
結 隔 瓜 錮 腹	G3262-2-X-X-1-090401	TPV MODEL	2436vwh	Rev	E
Key Component	3.0.INPUT	PCB NAME	715G3262-2	称 爹	<称爹>
Date	Thursday, June 11, 2009	Sheet	3 of 7		



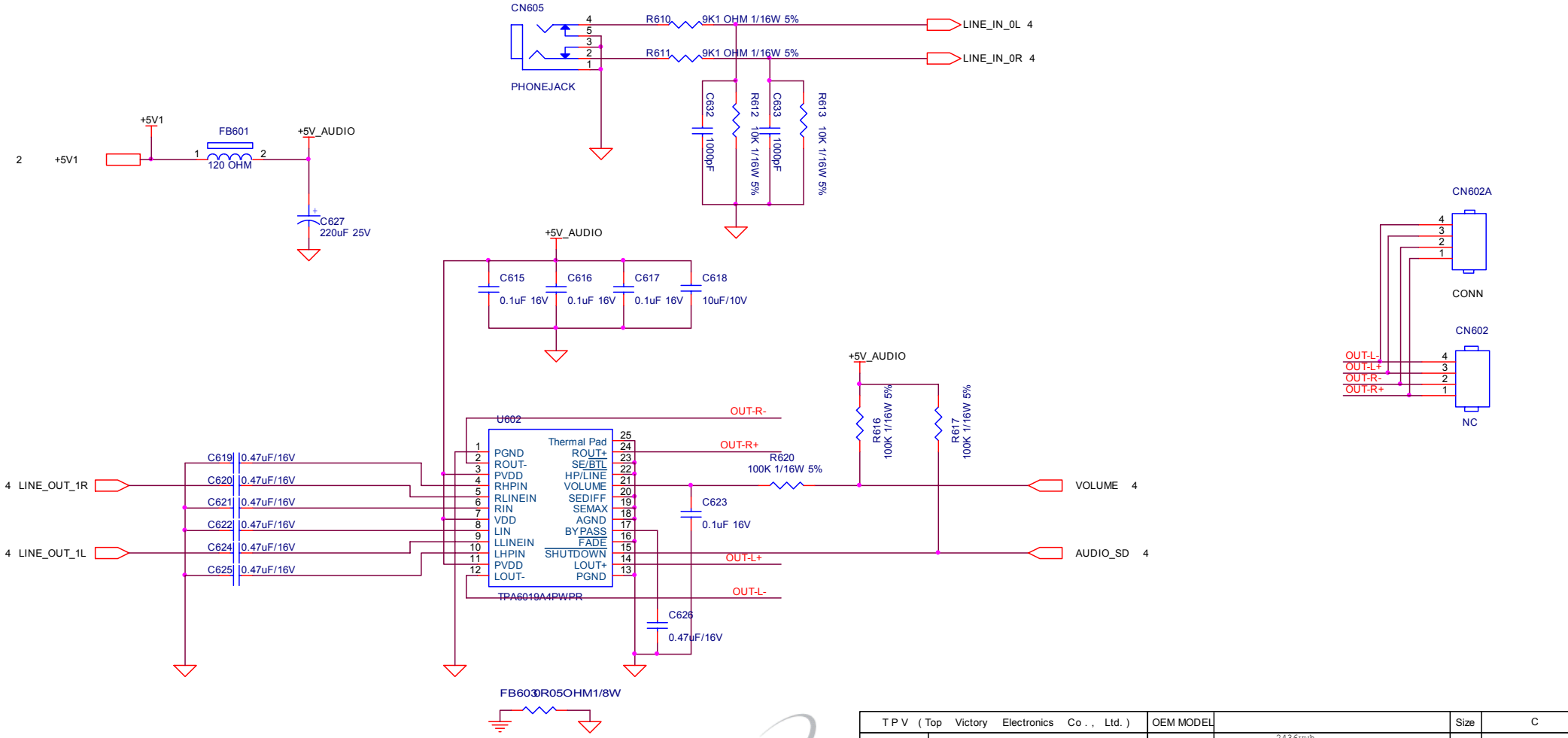
T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL		Size	C
版 箱 瓜 腻 腹	G3262-2-X-X-1-090401	TPV MODEL	2436vwh	Rev	E
Key Component	4.0.SCALER	PCB NAME	715G3262-2	标 签	<标签>
Date	Thursday, June 11, 2009	Sheet	4 of 7		



T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL		Size	A
結 隔 瓜 綑 腹	G3262-2-X-X-1-090401	TPV MODEL	2436vwh	Rev	E
Key Component	5.0.PANEL INTERFACE	PCB NAME	715G3262-2	称 爹	<称爹>
Date	Thursday , June 11, 2009	Sheet	5 of 7		



TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	B
結隔瓜網腹	G3262-2-X-X-1-090401	TPV MODEL	2436vwh	Rev	E
Key Component	6.0.HDMI INPUT	PCB NAME	715G3262-2	称爹	<称爹>
Date	Thursday, June 11, 2009	Sheet	6 of 7		

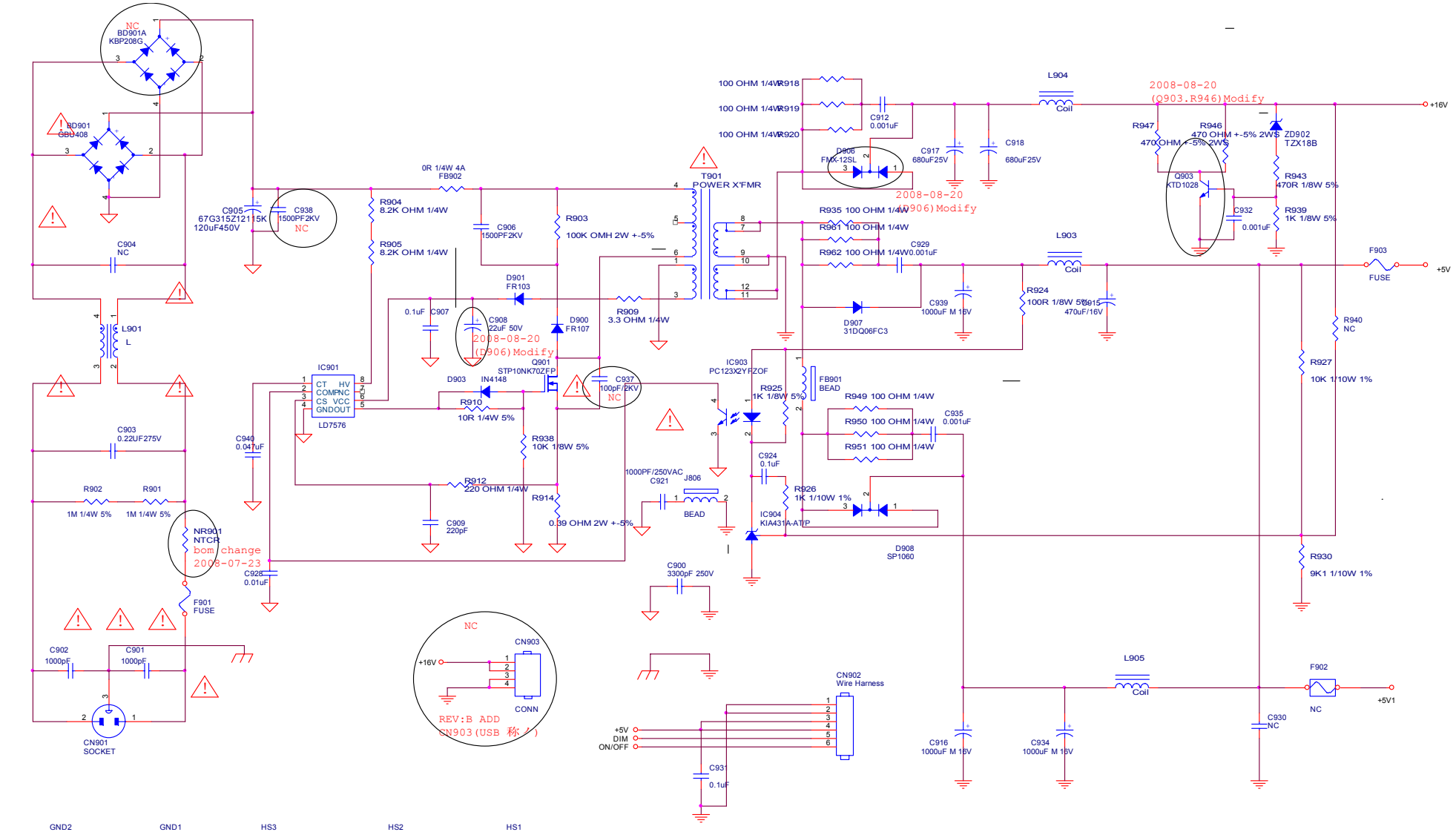


IC with Heat-sink(90G6119-1)

TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	C
結構代號	G3262-2-X-X-1-090401	TPV MODEL	2436vwh	Rev	E
Key Component	07.AUDIO	PCB NAME	715G3262-2	称爹	<称爹>
Date	Thursday, June 11, 2009	Sheet	7 of 7		

7.2 Power Board

715G2824 1 11



GND2 GND

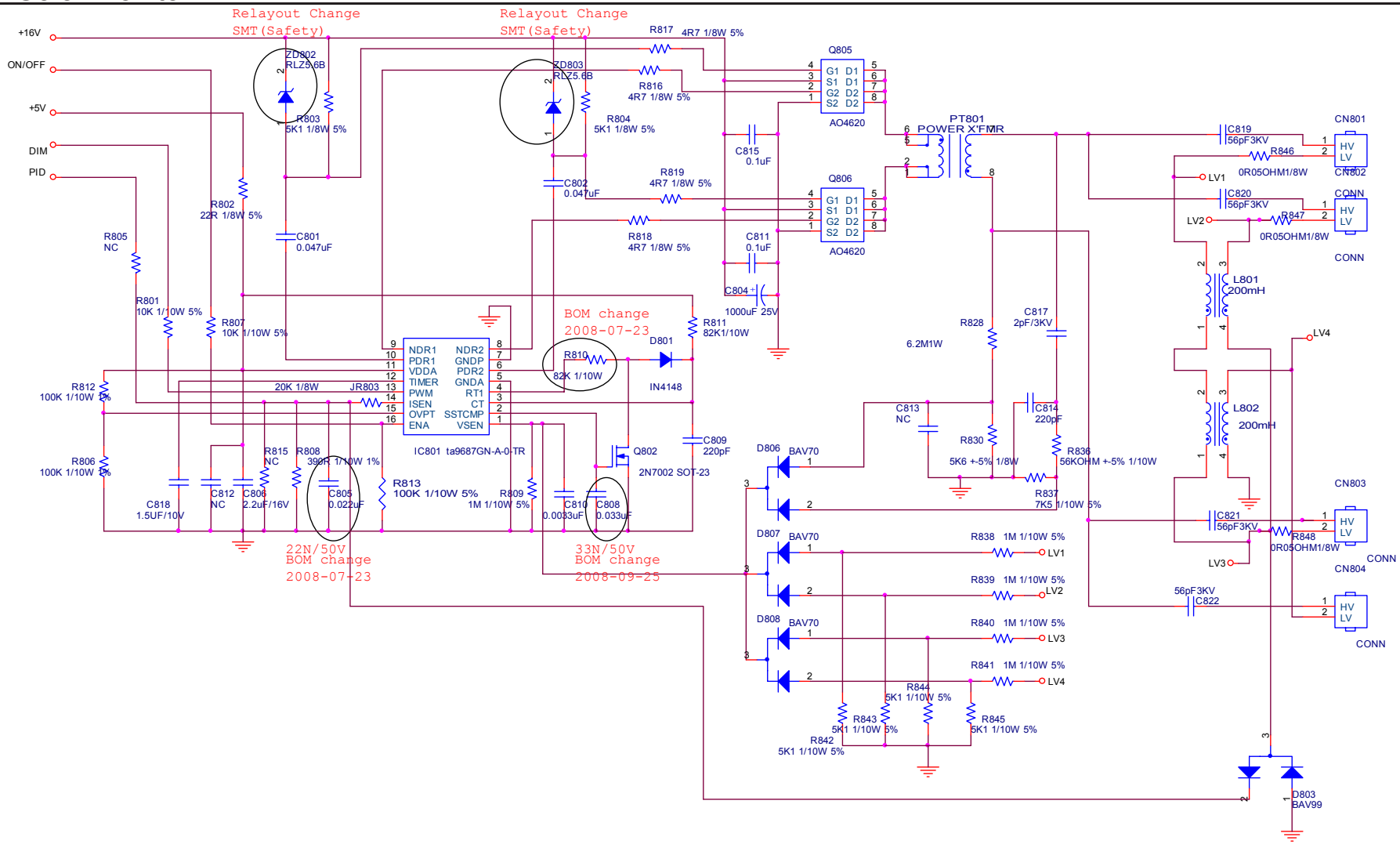
GND1 GND

HS3 HEAT SINK(D906)

HS2 HEAT SINK(D908)

HS1 HEAT SINK(Q901)

TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	2436v	Size	Custom
結構版版號	G2824-1-11-X-1-100426	TPV MODEL	PWPCAK41AHD1	Rev	1
Key Component	03.POWER	PCB NAME	715G2824-1-11	称多	ODM MODEL
Date	Tuesday, April 27, 2010	Sheet	3 of 3		

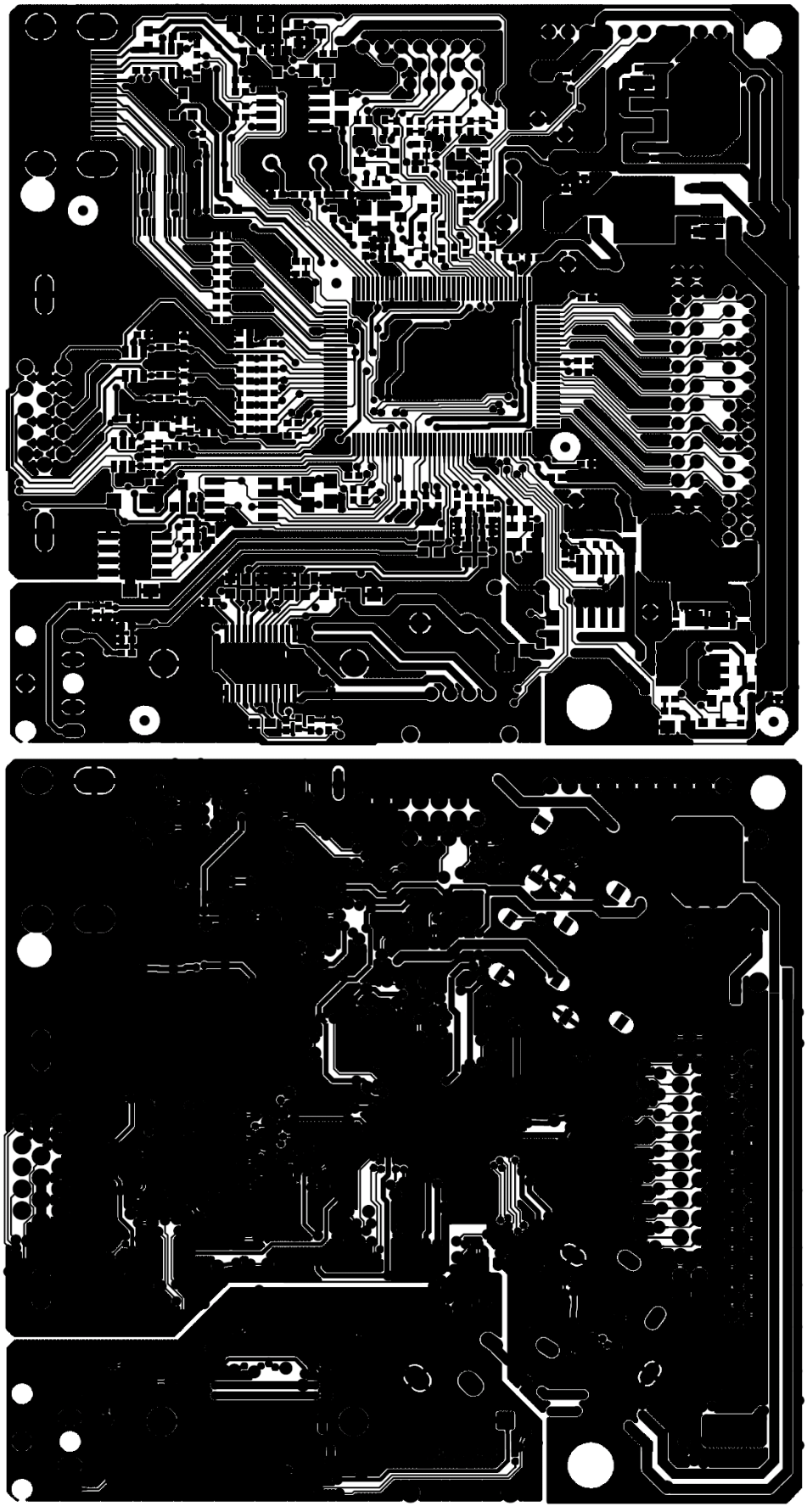


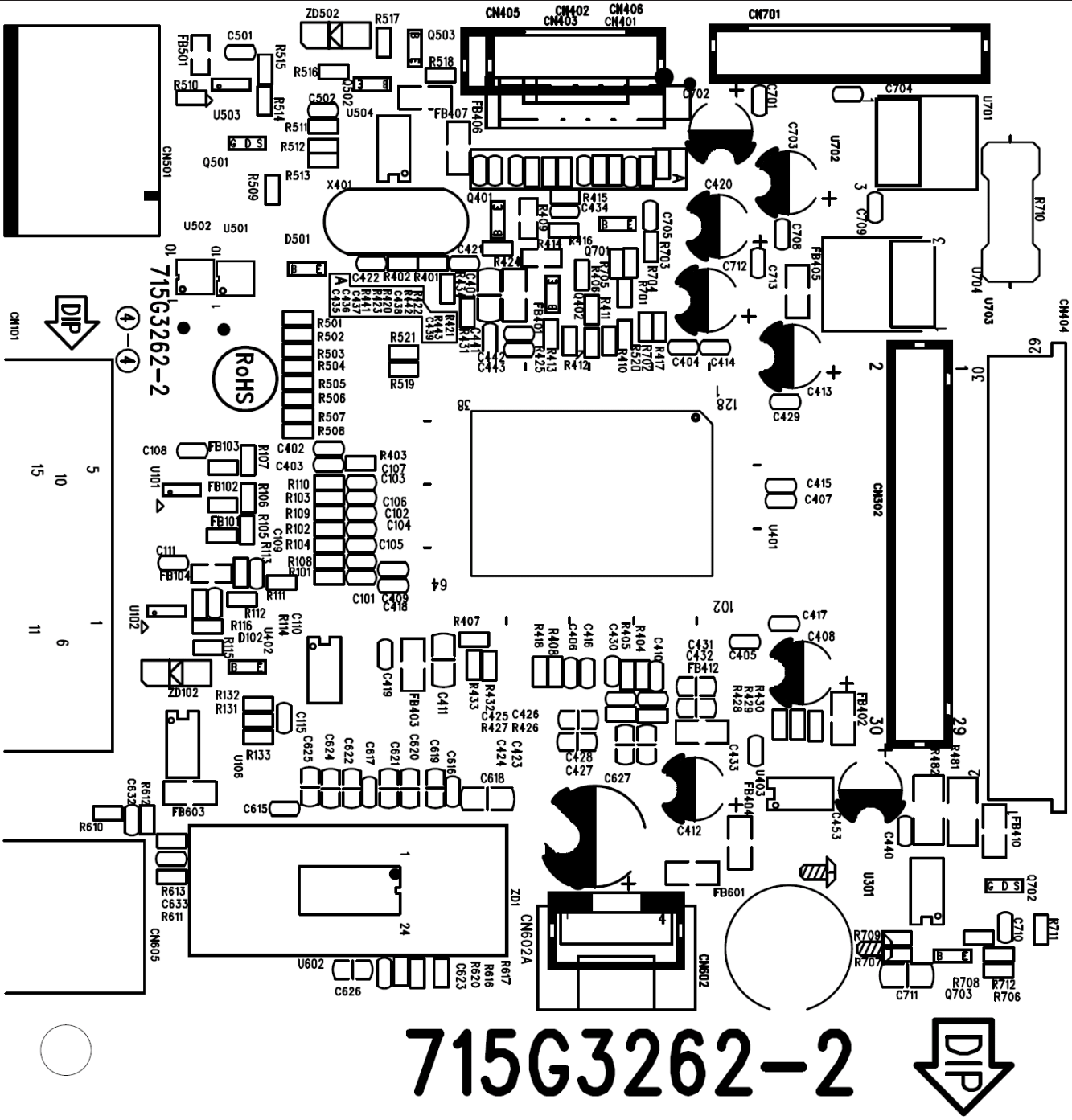
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	2436v	Size	Custom
結隔瓜錮腹	G2824-1-11-X-1-100426	TPV MODEL	PWPCAK41AHD1	Rev	1
Key Component	02.INVERTER	PCB NAME	715G2824-1-11	称爹	ODM MODEL
Date	Tuesday, April 27, 2010	Sheet	2 of 3		

8. PCB Layout

8.1 Main Board

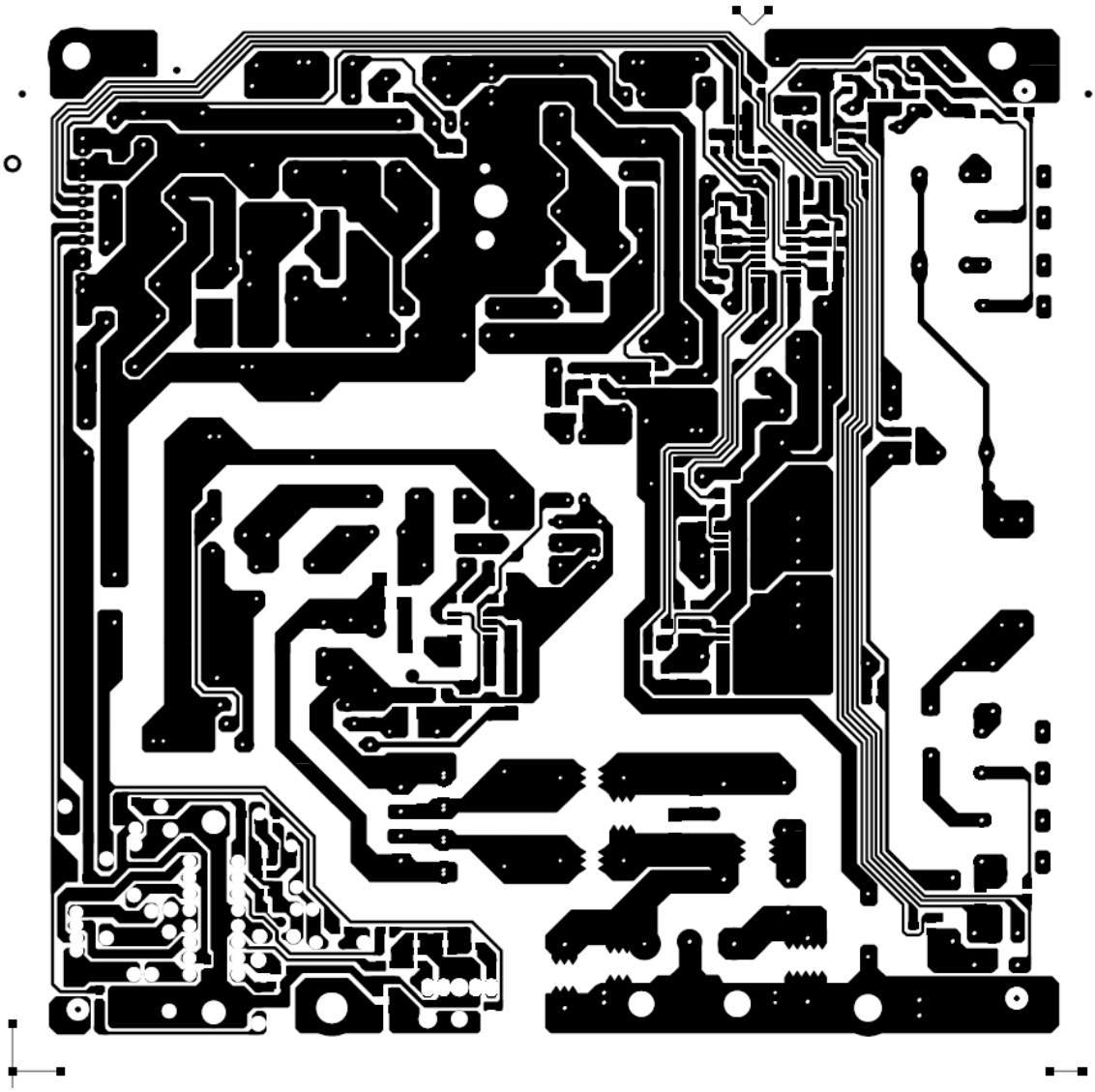
715G3262 2

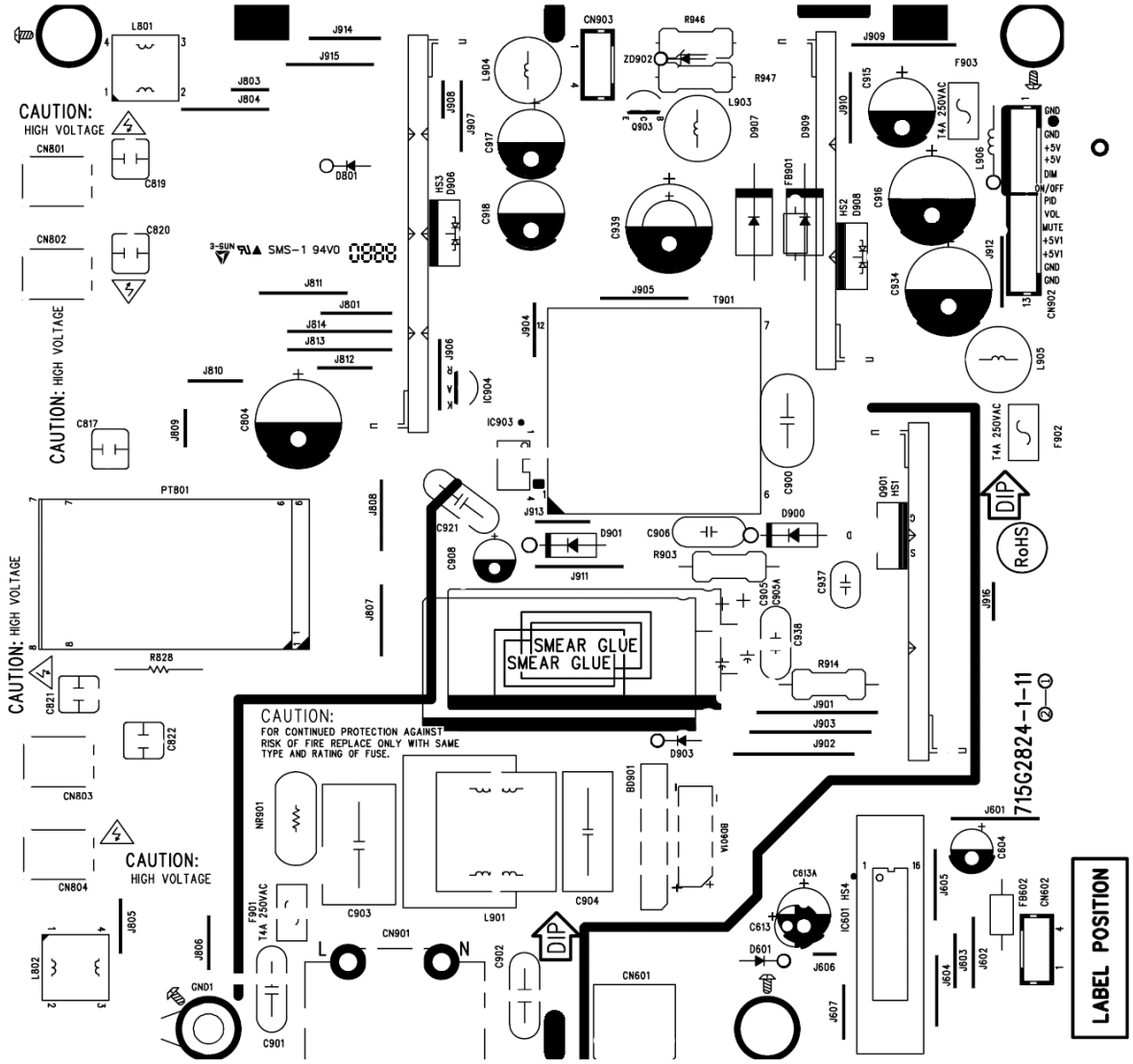



715G3262-2
715G3262-2
RoHS
DIP
DIP

8.2 Power Board

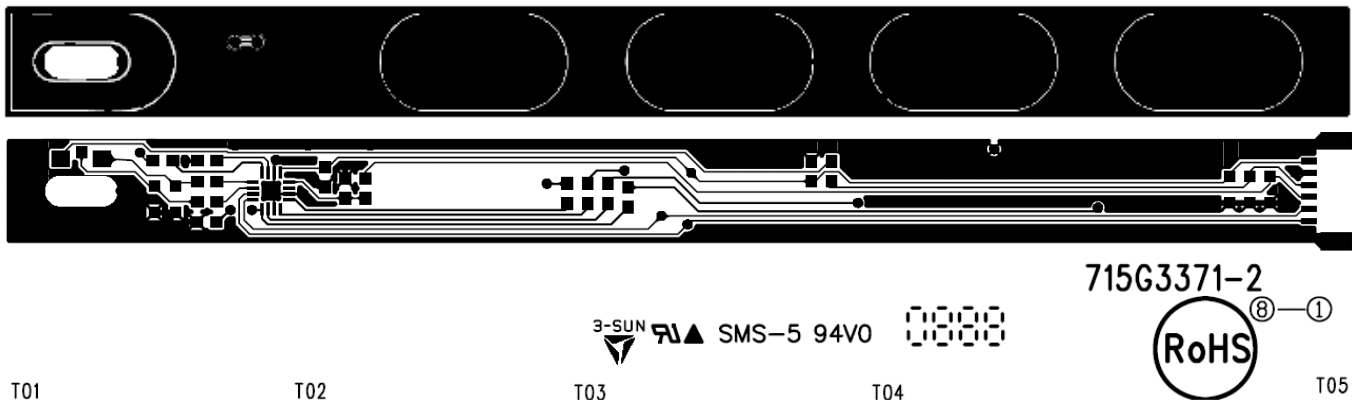
715G2824 1 11




CAUTION:
HIGH VOLTAGE
CAUTION: HIGH VOLTAGE
CAUTION: HIGH VOLTAGE
CAUTION: HIGH VOLTAGE
SMEAR GLUE
SMEAR GLUE
CAUTION:
FOR CONTINUED PROTECTION AGAINST
RISK OF FIRE REPLACE ONLY WITH SAME
TYPE AND RATING OF FUSE.
T4A 250VAC
T4A 250VAC
T4A 250VAC
GND
GND
+5V
+5V
DIM
ON/OFF
PID
VOL
MUTE
+5V1
+5V1
GND
GND
DIP
RoHS
715G2824-1-11
LABEL POSITION
L
N

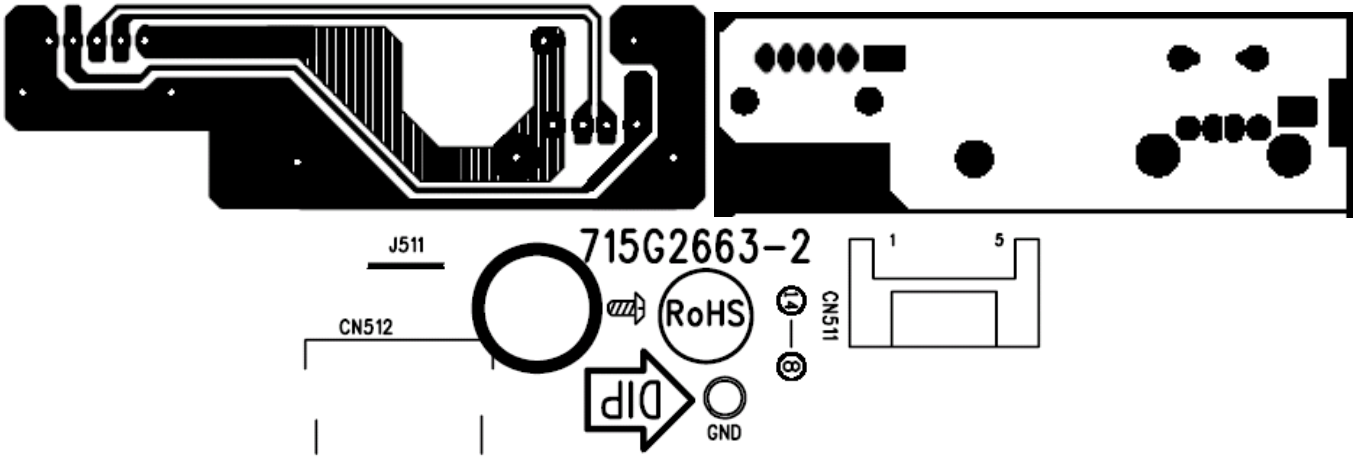
8.3 Key Board

715G3371 2

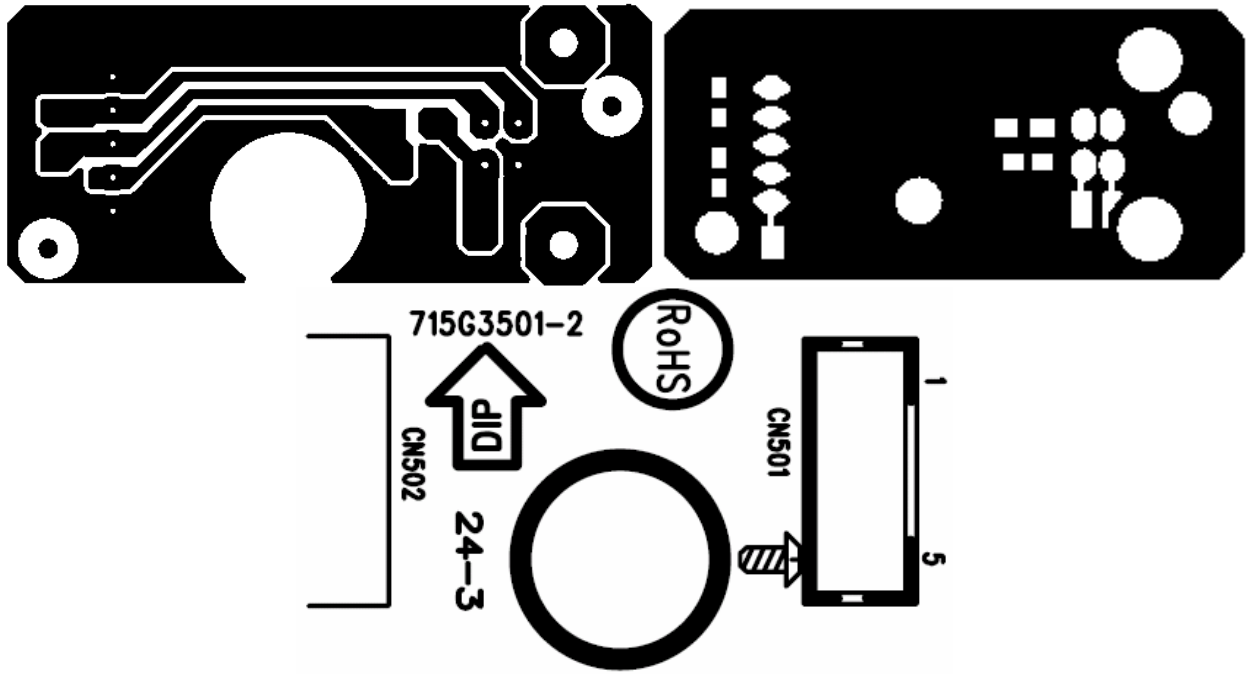


8.4 USB Board

715G2663 2



715G3501 2



9. Maintainability

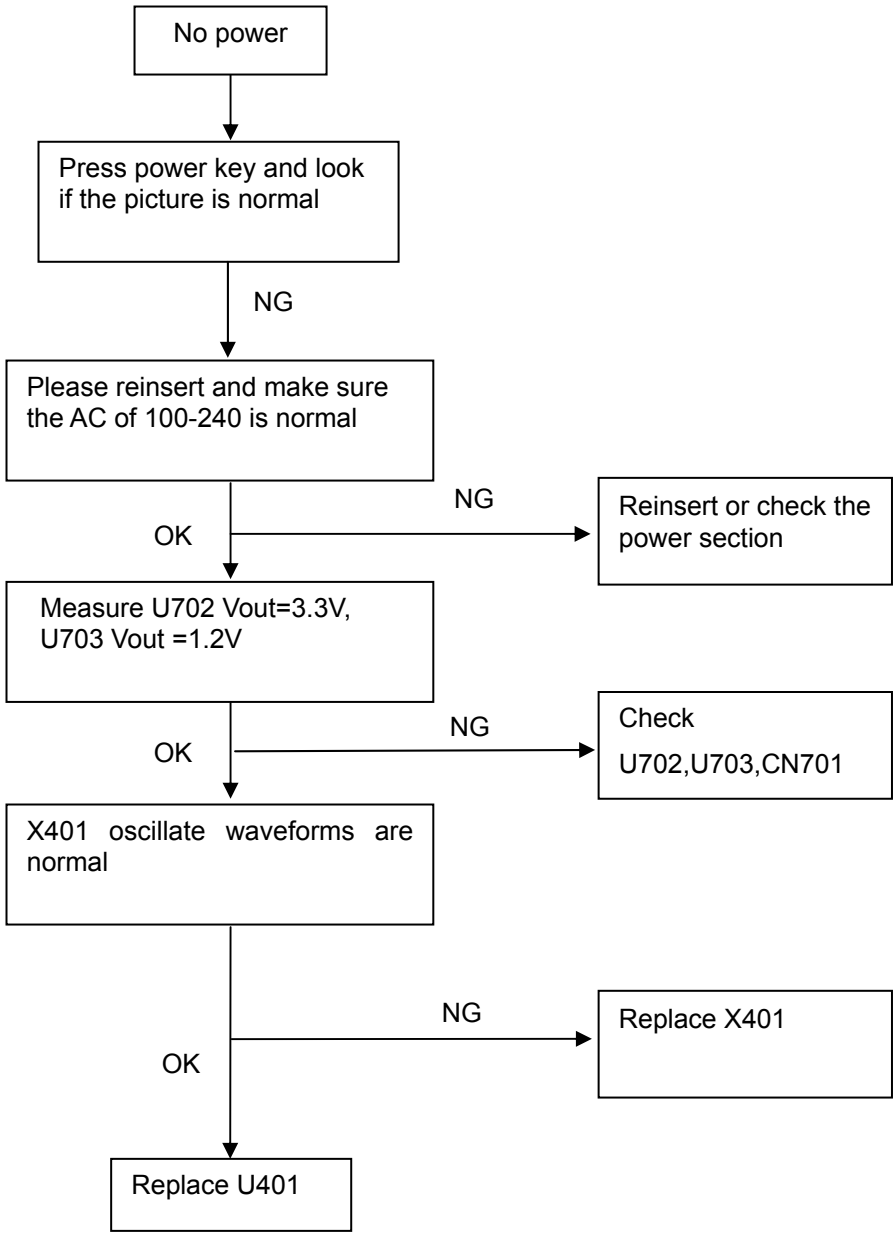
9.1 Equipments and Tools Requirement

1. Multi-meter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

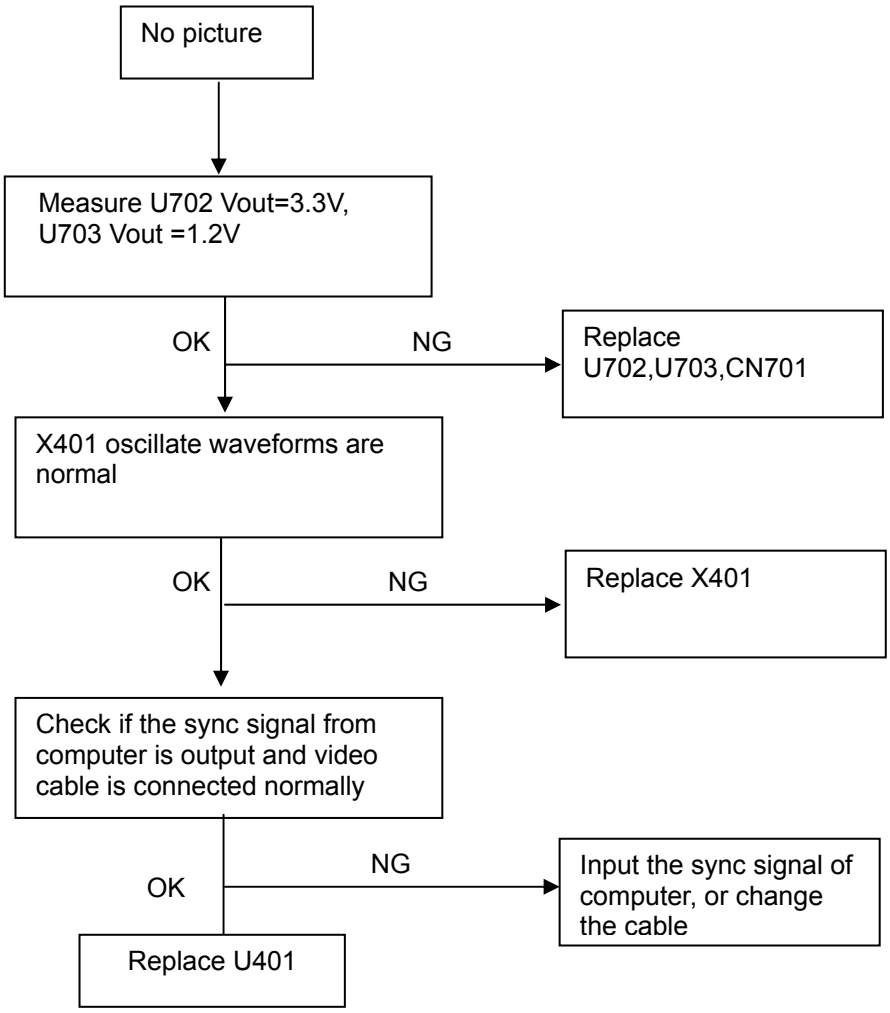
9.2 Trouble Shooting

9.2.1 Main Board

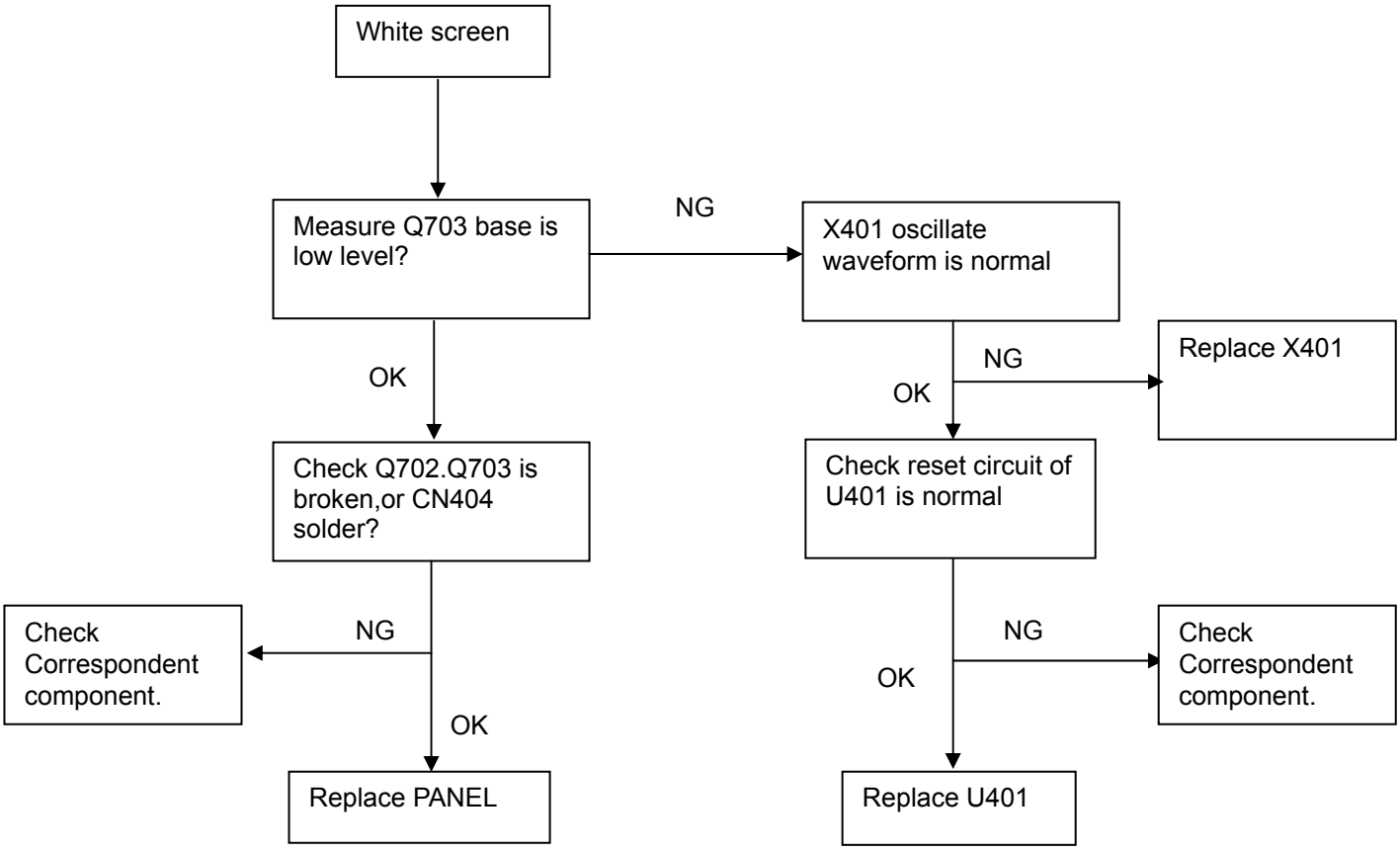
No Power



No Picture

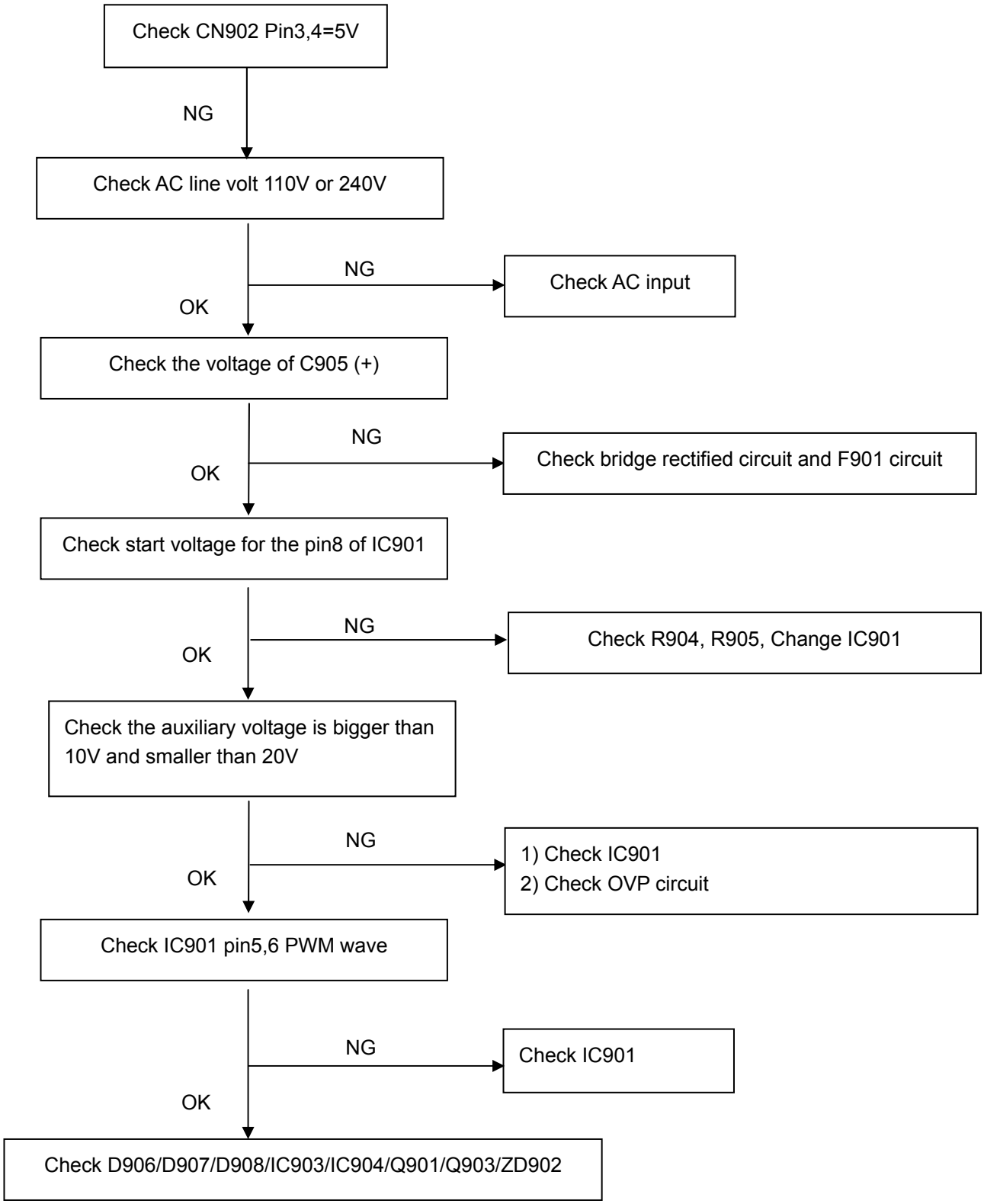

No picture
Measure U702 Vout=3.3V,
U703 Vout =1.2V
OK
NG
Replace
U702,U703,CN701
X401 oscillate waveforms are
normal
OK
NG
Replace X401
Check if the sync signal from
computer is output and video
cable is connected normally
NG
OK
Input the sync signal of
computer, or change
the cable
Replace U401

White Screen

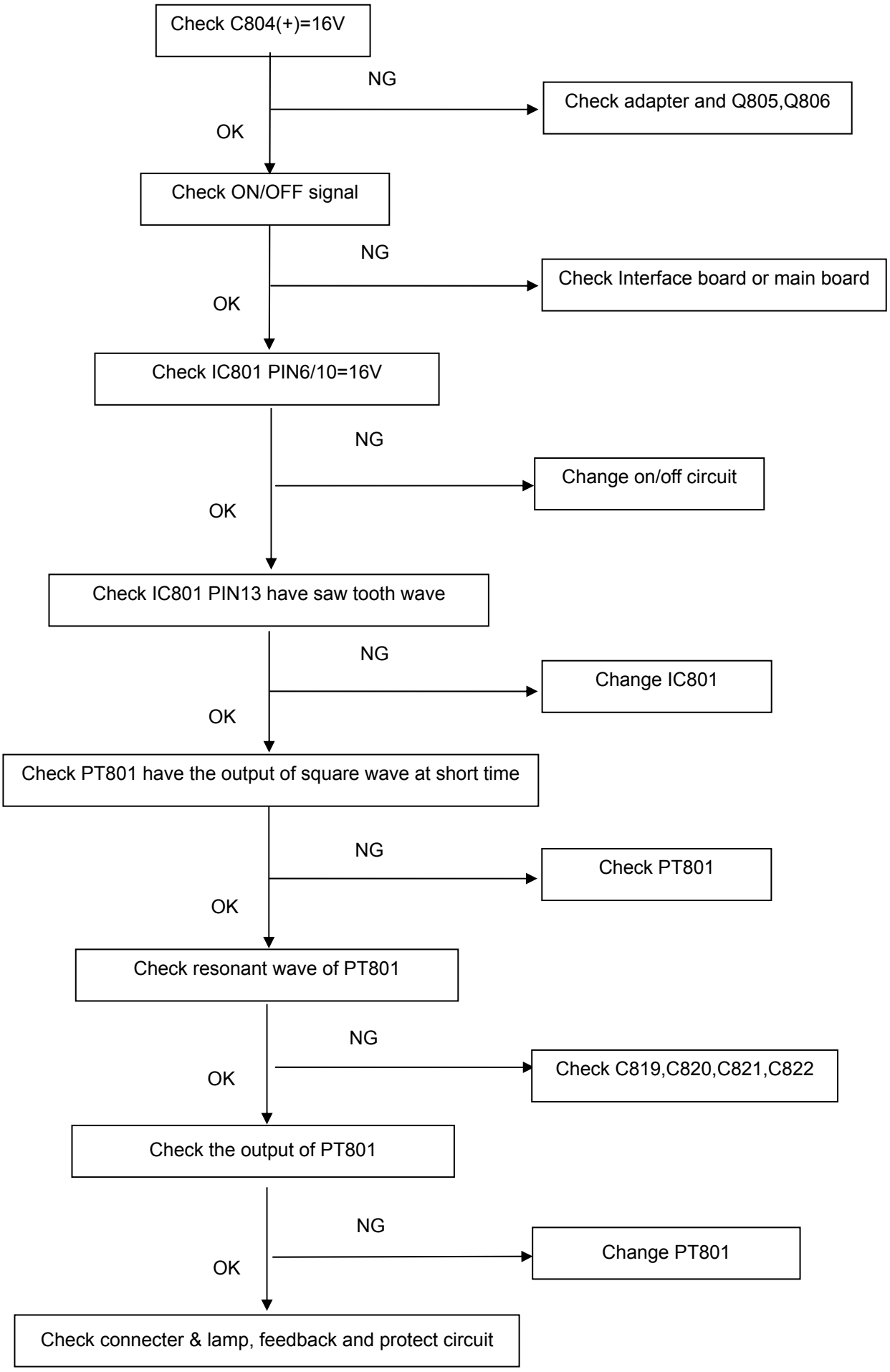


9.2.2 Power Board

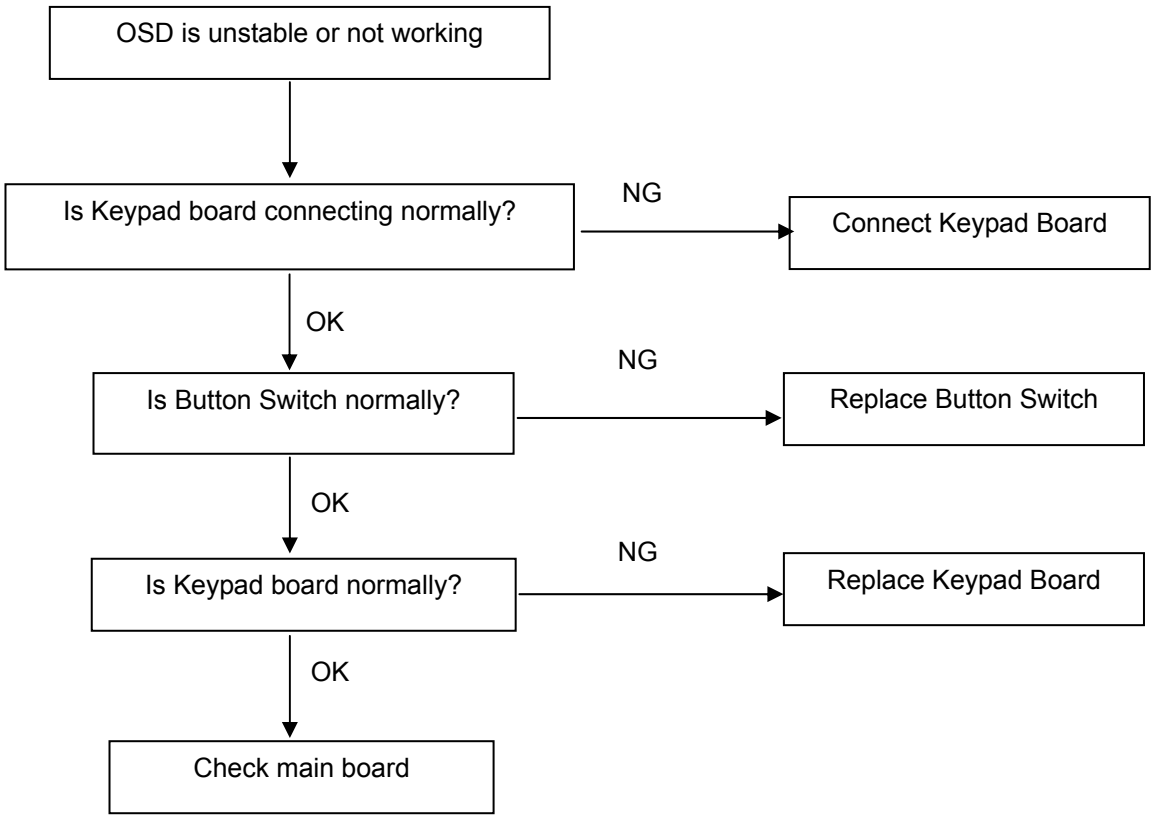
1) No power



2.) No Backlight



9.2.3 Key Board



10.Firmware and DDC Instruction

ISP & DDC writing SOP
Please land ftp://cs.tpv.com.cn/ to load relevant writing SOP in the related files.

Accounts: TPVSQZ
Code: TPVZGDLSQZ20090707

11. White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding White-Balance adjustment.

1. How to do the Chroma-7120 MEM. Channel setting

A. Reference to chroma 7120 user guide

B. Use " **SC**" key and " **NEXT**" key to modify x, y, Y value and use "**ID**" key to modify the TEXT description Following is the procedure to do white-balance adjust

2. Setting the color temp. you want

A. MEM.CHANNEL 4 (6500K color):

6500K color temp. parameter is x = 313 ±30, y = 329 ±30, Y = 210 cd/m^2

B. MEM.CHANNEL 3 (7300K color):

7300K color temp. parameter is x = 302 ±30, y = 318 ±30, Y = 180 cd/m^2

C. MEM.CHANNEL 9 (9300K color):

9300K color temp. parameter is x = 283 ±30, y = 297 ±30, Y = 170 cd/m^2

D. MEM.CHANNEL 10 (SRGB color):

SRGB color temp. parameter is x = 313 ±30, y = 329 ±30, Y = 170 cd/m^2

3. Enter into factory mode

Turn off the power, then press ∧ key,∨ key and press the Power button at the same time, the next, press the Menu button, You will enter into the factory mode.

4. Bias adjustment:

Set the **Contrast** to 50; Adjust the **Brightness** to 90.

5. Gain adjustment:

Move cursor to "-F-" and press MENU key

A. Adjust Warm (6500K) color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 313 ±30, y = 329 ±30, Y = 210 cd/m^2
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance =100±5

B. Adjust Normal (7300K) color-temperature

1. Switch the Chroma-7120 to **RGB-Mode** (with press "MODE" button)
2. Switch the MEM. Channel to Channel 4 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 302 ±30, y = 318 ±30, Y =180 cd/m^2
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance =100±5

C. Adjust Cool (9300K) color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press "MODE" button)

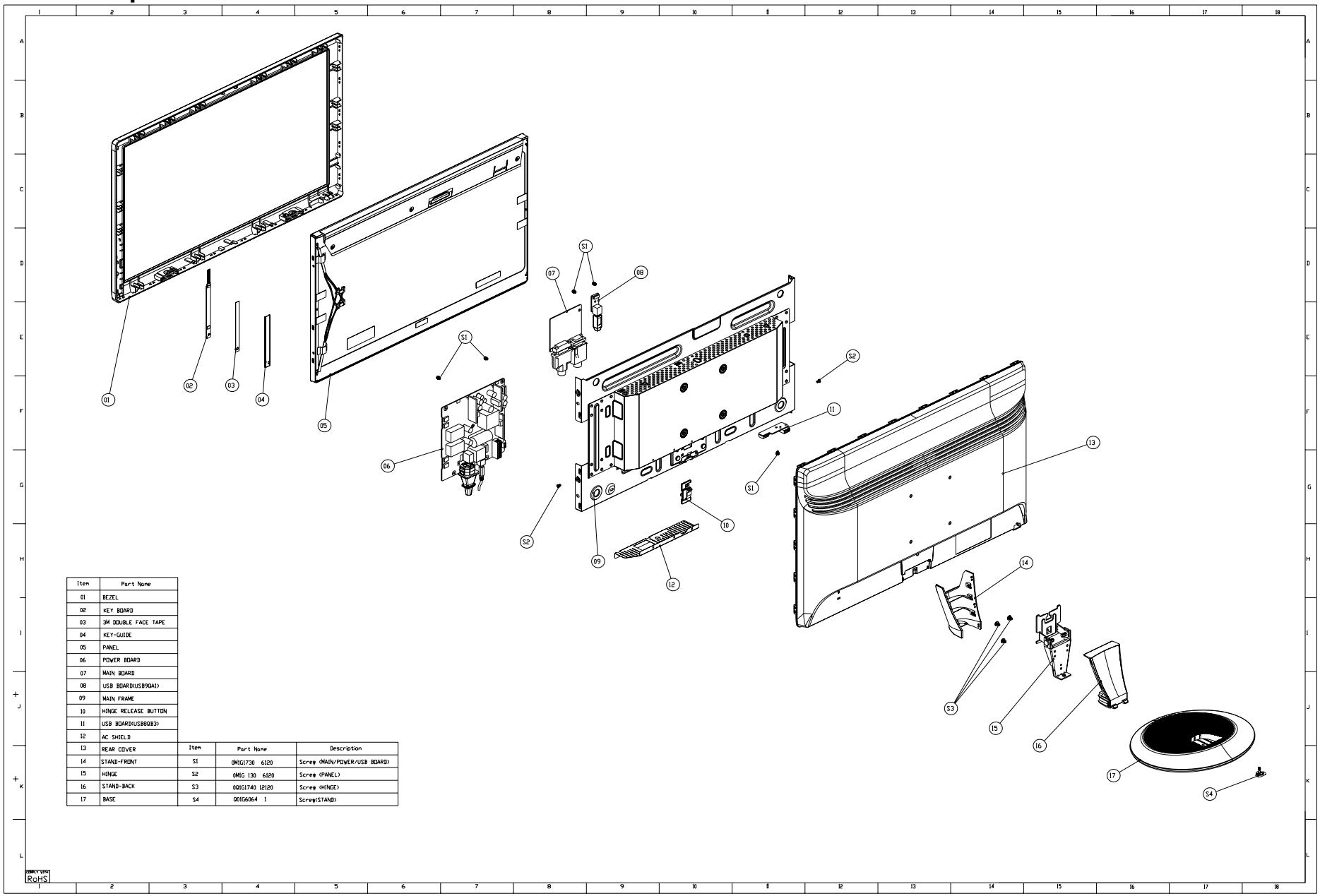
2. Switch the MEM.channel to Channel 9(with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 283±30, y = 297 ±30, Y =170 cd/m^2
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance =100±5

D. Adjust SRGB color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press “MODE” button)
2. Switch the MEM.channel to Channel 10(with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 313±30, y = 329 ±30, Y =170 cd/m^2
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4,5,6) until chroma 7120 RGB value meet the tolerance =100±5

E. Turn the Power-button off to quit from factory mode.

12. Monitor Exploded View



Item	Part Name
01	BEZEL
02	KEY BOARD
03	3M DOUBLE FACE TAPE
04	KEY-GUIDE
05	PANEL
06	POWER BOARD
07	MAIN BOARD
08	USB BOARD(USB90A1)
09	MAIN FRAME
10	HINGE RELEASE BUTTON
11	USB BOARD(USB80B3)
12	AC SHIELD
13	REAR COVER
14	STAND-FRONT
15	HINGE
16	STAND-BACK
17	BASE

Item	Part Name	Description
S1	0MIG1730 6120	Screw (MAIN/POWER/USB BOARD)
S2	0MIG 130 6120	Screw (PANEL)
S3	001G1740 12120	Screw (HINGE)
S4	001G6064 1	Screw(STAND)

13. BOM List

Note: The parts information listed below are for reference only, and are subject to change without notice. Please go to http://cs.tpv.com.cn/hello1.asp for the latest information.

HKAASBNK6WA1PNE

Location	Part No.	Description	Remark
	026G 800504 H	BARCODE	
	040G 58162435A	P/N LABEL FOR MANUAL PE BAG	
	052G 1186	SMALL TAPE	
	052G 1208 A	ALUMINIUM TAPE	
	052G 1211 B	Conductive Tape 85mm *40mm *0.09mm	
HDCP-L	070GHDCP500HDC	HDCP CODE	
E07801	078G0020 2 V	SPEAKER 4 OHM 2 W 430/230mm 40X20mm	
E08908	089G 184HAA500	HDMI CABLE	
E08902	089G 715HAAE01	SIGNAL CABLE	
E08907	089G179J30N522	FFC CABLE	
E08901	089G402A15N HL	AC POWER CORD 1500M America Reg.	
E09508	095G8014 5WH09	HARNESS 5P(PLUG)-5P(2501) 200MM	
E09503	095G8014 7TE05	HARNESS 7P-6P 350MM	
	0D1G1730 6120	SCREW	
	0D1G1730 8120	SCREW	
	0M1G 130 6120	SCREW M3X6	
	705GH934026	24"LCD STAND-BASE ASS'Y	
E750	750GLU240H1213N000	PANEL M240HW01 V200 XIAMEN AUO	
E750	750GLU240H1217N000	PANEL M240HW01 V200 WJ AUO	2nd source
E750	750GLU240H1223N000	PANEL M240HW01 V20A XIAMEN AUO	2nd source
	A15G1265302	MAIN FRAME 2436V	
	A34G1063AEDA8S0100	REAR COVER 2436V	
	A34G1938AEDA1B0130	BEZEL 24"	
	A85G0140101	AC Shield	
	H40G 24N61519A	2436Vh 北美 ID LABEL	
	H40G 58161569A	USB LABEL	
	H40G 58361517A	2436Vh 外销 Carton label	
	H40G 58361520A	2436Vh Fr carton label	
	H40G 58361521A	HDMI Win7 GOLD EPA	
	H41G780061589B	QSG	
	H44GD027102	EPS	
	H44GD027202	EPS	
	H44GD027615 9A	2436Vh CARTON	
	H45G 77 6	PE PACKING	
	H45G 87 1 20	EPE COVER	
	H70G2010615 8A	2436Vh CD MANUAL	
	KEPC9HAB	KEY BOARD	
	PWPCAK41AHD2	POWER BOARD	
	Q45G 76 28 H A	PE BAG FOR MANUAL	
	Q45G 76 28V13 A	PE BAG	
	Q50G 4 10	TIE (Y1900221)	
	Q52G 1185 99	big carton tape for aoc	
	USB9HA1	USB BOARD	
	USB9HA2	USB BOARD	
	0Q1G1040 10120	SCREW	

	A34G1064AED 1S0100	Stand-Front	
	A34G1065ABJ 1S0100	Stand-Back	
	A34G1066AED 1S0130	BASE	
	A37G0108 2	HINGE	
	H01G6006 1	Screw	
	756GHACB A1020	MAIN BOARD-CBPC9SBA1H1	
SMTCA-U402	100GAMAK004W11	MCU ASS'Y-056G1133 81	
CN602	033G3802 4	WAFER PH-4	
CN403	033G3802 7B Y L	conn 2.0 7p	
CN701	033G380210B Y W	WAFER	
CN404	033G801930F CH JS	CONNECTOR	
	040G 45762412B	CBPC LABEL	
R710	061G152M33964L	RST MOFR 3.3 OHM +-5% 2WS	
CN605	088G 30214K	PHONE JACK 5PIN	
CN101	088G 35315F XH	D-SUB 15PIN VERTICAL CONN WITH SCREW	
X401	093G 2253B J	NXS14.31818AC32F-KAB10	
E09513	095G8022 6D504	HARNESS 6P-6P 200MM	
	A33G0564 2 1L0100	Key-Guide	
	Q52G 3 75	3M DOUBLE FACE TAPE	
GND1	009G6005 1	GROUND TERMINAL	
CN804	033G8021 2E L	CONNECTOR	
CN803	033G8021 2E L	CONNECTOR	
CN802	033G8021 2E L	CONNECTOR	
CN801	033G8021 2E L	CONNECTOR	
	040G 45762412B	CBPC LABEL	
IC903	056G 139 7 1	IC EL817MA M-TYPE	
NR901	061G 58809MEN	RST NTCR 8OHM ＋－20％ 4A XIANZHENG	
R946	061G152M561 64 SY	RST MOFR 560 OHM +-5% 2WS FUTABA	
R947	061G152M561 64 SY	RST MOFR 560 OHM +-5% 2WS FUTABA	
C904	063G107K2246S1	X2 CAP 0.22UF K 275VAC	
C903	063G107K224AUM	CAP X2 0.22uF 10% 305V	
C822	065G 3J5606ET	CAP CER 56PF J 3KV	
C821	065G 3J5606ET	CAP CER 56PF J 3KV	
C820	065G 3J5606ET	CAP CER 56PF J 3KV	
C819	065G 3J5606ET	CAP CER 56PF J 3KV	
C817	065G 6J2096ET	2PF 5% SL 6KV	
C902	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C901	065G305M1022BP	Y2 1000PF M 250VAC Y5P	
C921	065G306M1022BP	1000PF Y1.CAP	
C900	065G306M3322BP	3300PF 20%	
C804	067G215A1024KV	EC 1000uF 25V 12.5*20mm	
C939	067G215P1023XV	CAP 105℃ 1000UF M 16V	
C934	067G215P1024AV	CAP 105℃ 1000UF M 25V	
C915	067G215P4713AV	CAP 105℃ 470UF M 16V	
C918	067G215P6814AV	CAP 105C 680UF M 25V	
C917	067G215P6814AV	CAP 105C 680UF M 25V	
C905	067G315Z12115K	CAP 105℃ 120UF M 450V	
L903	073G 253 91 L	CHOKE BY LI TA	
L904	073G 253 91 L	CHOKE BY LI TA	
L905	073G 253 91 L	CHOKE BY LI TA	
CN901	087G 501 32 DL	AC SOCKET DIP 3PIN+2PIN GROUND	

D907	093G3006 1 1	31DQ06FC3 NIHON INTER	
CN902	095G 82013WE02	HARNESS 13P-9P 190MM	
	705GQ857026	Q901 ASS'Y	
	705GQ893039	D908 ASS'Y	
	705GQ893040	D906 ASS'Y	
	PWAK41AHD2SMT	POWER BOARD FOR SMT	
L802	S73G17435VA	Transformer	
L801	S73G17435VA	Transformer	
L901	S73L17426VG	LINE FILTER ASS'Y	
T901	S80GL22T3V1	XFMR POWER 490uH TPV-PT	
PT801	S80GL24T23V	XFMR POWER 68uH TPV-PT VOC	
BD901	093G 50460911	BRIDGE GBU406 4A/800V	
CN511	033G3802 5 BH L	CONNECTOR 5PIN	
CN512	088G 352 2 XH	USB CONN	
	715G2663 2	USB BOARD PCB	
CN501	033G3802 5B Y L	CONN 2.0 5P	
CN502	088G 351 2B XH	USB CONN	
C420	067G 305100 7T	105 摄氏度 10UF +-20% 50V	
C413	067G 305100 7T	105 摄氏度 10UF +-20% 50V	
C412	067G 305100 7T	105 摄氏度 10UF +-20% 50V	
C408	067G 305100 7T	105 摄氏度 10UF +-20% 50V	
C703	067G 305101 3T	100UF 16V 105C	
C702	067G 305101 3T	100UF 16V 105C	
C712	067G 305101 3T	100UF 16V 105C	
C627	067G 4152214KT	EC 220uF 25V M 8*12mm	
U401	056G 562227	IC TSUMU58KDT-LF-1 PQFP-128	
U703	056G 563146	IC G912T63U 1A/1.2V SOT-223	
U702	056G 585 4A	IC AP1117E33L-13	
U602	056G 616 23	T PA6019A4	
U501	056G 662500	IC ESD AZ1045-04QU	
U502	056G 662500	IC ESD AZ1045-04QU	
U503	056G 662502	C ESD AZC199-04S SOT23-6L	
U102	056G 662502	C ESD AZC199-04S SOT23-6L	
U101	056G 662502	C ESD AZC199-04S SOT23-6L	
U403	056G1133 32	IC M24C04-WMN6TP SO8	
U402	056G1133 81	SST25LF020A-33-4C-SAE	
U106	056G1133918	IC AT24C02BN-SH-T 8-SOIC	
U504	056G1133918	IC AT24C02BN-SH-T 8-SOIC	
Q701	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q503	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q502	057G 417 12 T	KEC 2N3904S-RTK/PS	
Q401	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q402	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q703	057G 417 13 T	KEC 2N3906S-RTK/PS	
Q702	057G 763 1	A03401 SOT23 BY AOS(A1)	
R501	061G0402000	RST CHIP MAX 0R05 1/16W	
R502	061G0402000	RST CHIP MAX 0R05 1/16W	
R503	061G0402000	RST CHIP MAX 0R05 1/16W	
R504	061G0402000	RST CHIP MAX 0R05 1/16W	
R505	061G0402000	RST CHIP MAX 0R05 1/16W	
R506	061G0402000	RST CHIP MAX 0R05 1/16W	

R507	061G0402000	RST CHIP MAX 0R05 1/16W	
R508	061G0402000	RST CHIP MAX 0R05 1/16W	
FB101	061G0402000	RST CHIP MAX 0R05 1/16W	
FB102	061G0402000	RST CHIP MAX 0R05 1/16W	
FB103	061G0402000	RST CHIP MAX 0R05 1/16W	
R401	061G0402000	RST CHIP MAX 0R05 1/16W	
R402	061G0402000	RST CHIP MAX 0R05 1/16W	
R422	061G0402000	RST CHIP MAX 0R05 1/16W	
R423	061G0402000	RST CHIP MAX 0R05 1/16W	
R434	061G0402000	RST CHIP MAX 0R05 1/16W	
R702	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R515	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R514	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R433	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R432	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R411	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R410	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R405	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R404	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R116	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R115	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R110	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R109	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R108	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	
R516	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R425	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R413	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R112	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R111	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	
R513	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R518	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R520	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R521	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R612	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R613	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R701	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R703	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R704	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R706	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R707	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R711	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R132	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R406	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R407	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R408	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R415	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R417	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R418	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R426	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R427	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R428	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	

R429	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R430	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W	
R616	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R617	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R620	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W	
R416	061G0402203	RST CHIP 20K 1/16W 5%	
R424	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R114	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R113	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	
R519	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R705	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R709	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W	
R509	061G0402273	RST CHIP 27K 1/16W 5%	
R403	061G0402390 0F	RST CHIP 390R 1/16W 1%	
R442	061G0402392	RST CHIP 3.9K 1/16W 5%	
R443	061G0402392	RST CHIP 3.9K 1/16W 5%	
R104	061G0402471	RST CHIPR 470 OHM +-5% 1/16W	
R131	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R133	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R511	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R512	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R517	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	
R101	061G0402560	RST CHIP 56R 1/16W 5%	
R102	061G0402560	RST CHIP 56R 1/16W 5%	
R103	061G0402560	RST CHIP 56R 1/16W 5%	
R708	061G0402683	CHIP 68K 1/16W 5%	
R105	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R106	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R107	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	
R610	061G0402912	RST CHIP 9K1 1/16W 5%	
R611	061G0402912	RST CHIP 9K1 1/16W 5%	
R414	061G0603000	RST CHIP MAX 0R05 1/10W	
R409	061G0603201	RST CHIPR 200 OHM +-5% 1/10W	
R481	061G1206301	RST CHIPR 300 OHM +-5% 1/4W	
R482	061G1206301	RST CHIPR 300 OHM +-5% 1/4W	
C633	065G0402102 32	1000PF +-10% 50V X7R	
C632	065G0402102 32	1000PF +-10% 50V X7R	
C426	065G0402102 32	1000PF +-10% 50V X7R	
C425	065G0402102 32	1000PF +-10% 50V X7R	
C104	065G0402102 32	1000PF +-10% 50V X7R	
C436	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C440	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C441	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C615	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C616	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C617	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C623	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C701	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C704	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C705	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C708	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	

C709	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C713	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C434	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C402	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C403	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C404	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C405	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C406	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C407	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C409	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C410	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C414	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C415	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C416	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C417	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C418	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C435	065G0402105 A5	CAP 0402 1UF K 10V X5R	
C110	065G0402220 31	CHIP 22PF 50V NPO	
C109	065G0402220 31	CHIP 22PF 50V NPO	
C115	065G0402224A5K T	CAP CHIP 0402 0.22UF 10V X5R	
C419	065G0402224A5K T	CAP CHIP 0402 0.22UF 10V X5R	
C433	065G0402224A5K T	CAP CHIP 0402 0.22UF 10V X5R	
C710	065G0402224A5K T	CAP CHIP 0402 0.22UF 10V X5R	
C421	065G0402330 31	CHIP CAP 0402 33pF J 50V NPO	
C422	065G0402330 31	CHIP CAP 0402 33pF J 50V NPO	
C107	065G0402473 12	CHIP 0.047uF 16V X7R	
C106	065G0402473 12	CHIP 0.047uF 16V X7R	
C105	065G0402473 12	CHIP 0.047uF 16V X7R	
C103	065G0402473 12	CHIP 0.047uF 16V X7R	
C102	065G0402473 12	CHIP 0.047uF 16V X7R	
C101	065G0402473 12	CHIP 0.047uF 16V X7R	
C431	065G0603105A2K T	CAP CHIP 0603 1UF K 10V X7R	
C428	065G0603225 A5	CHIP 2.2uF 10V X5R	
C427	065G0603225 A5	CHIP 2.2uF 10V X5R	
C424	065G0603225 A5	CHIP 2.2uF 10V X5R	
C423	065G0603225 A5	CHIP 2.2uF 10V X5R	
C626	065G0603474 12	MLCC 0603 0.47UF K 16V X7R	
C625	065G0603474 12	MLCC 0603 0.47UF K 16V X7R	
C624	065G0603474 12	MLCC 0603 0.47UF K 16V X7R	
C622	065G0603474 12	MLCC 0603 0.47UF K 16V X7R	
C621	065G0603474 12	MLCC 0603 0.47UF K 16V X7R	
C620	065G0603474 12	MLCC 0603 0.47UF K 16V X7R	
C619	065G0603474 12	MLCC 0603 0.47UF K 16V X7R	
C432	065G0603475A5K A	CAP 0603 4.7UF 10V X5R K	
C711	065G0805106 A7	CHIP 10uF 10V Y5V 0805	
C618	065G0805106 A7	CHIP 10uF 10V Y5V 0805	
C411	065G0805106 A7	CHIP 10uF 10V Y5V 0805	
C401	065G0805106 A7	CHIP 10uF 10V Y5V 0805	
FB603	071G 56K121 M	CHIP BEAD	
FB601	071G 56K121 M	CHIP BEAD	
FB410	071G 56K121 M	CHIP BEAD	

FB407	071G 56K121 M	CHIP BEAD	
FB405	071G 56K121 M	CHIP BEAD	
FB404	071G 56K121 M	CHIP BEAD	
FB403	071G 56K121 M	CHIP BEAD	
FB402	071G 56K121 M	CHIP BEAD	
FB401	071G 56K121 M	CHIP BEAD	
FB412	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 bullwill	
FB104	071G 59B121	TB160808B	
FB501	071G 59B121	TB160808B	
CN501	088G 340 19 DL	HDMI HEADER 19P	
D501	093G 60505	DIO SIG SM BAT54C(PHSE)R	
D102	093G 64 42 P	BAV70 SOT23 BY PAN JIT	
ZD502	093G 39S 24 T	RLZ 5.6B LLDS	
ZD102	093G 39S 24 T	RLZ 5.6B LLDS	
	715G3262 2	MAIN BOARD PCB	
CN001	033G8034 6H H X	WAFER 1.0mm SMT 6P	
U001	056G 669 10	IC CG7246AM QFN-16(COL)	
R012	061G0603000	RST CHIP MAX 0R05 1/10W	
R009	061G0603000	RST CHIP MAX 0R05 1/10W	
R008	061G0603000	RST CHIP MAX 0R05 1/10W	
R001	061G0603000	RST CHIP MAX 0R05 1/10W	
R002	061G0603101	RST CHIPR 100 OHM +-5% 1/10W	
R007	061G0603561	RST CHIPR 560 OHM +-5% 1/10W	
R006	061G0603561	RST CHIPR 560 OHM +-5% 1/10W	
R005	061G0603561	RST CHIPR 560 OHM +-5% 1/10W	
R004	061G0603561	RST CHIPR 560 OHM +-5% 1/10W	
C001	065G0603102 31	CHIP 1000PF 50V NPO	
C002	065G0603225 A5	CHIP 2.2uF 10V X5R	
LED001	081G15BY 2 GP	LED GPTD1204BOC1-A GP	
ZD004	093G 39S 34 T	UDZSNP5.6B ROHM	
ZD005	093G 39S 34 T	UDZSNP5.6B ROHM	
	715G3371 2	KEY BOARD PCB	
Q901	057G 667 21	STP10NK70ZFP	
	0M1G 930 8120	SCREW	
HS1	Q90G6263 6	HEAT SINK	
D908	093G 60278	DIODE SP1060 ITO-220 SECOS	
	0M1G 930 8120	SCREW	
HS2	Q90G6263 6	HEAT SINK	
D906	093G 52 66	DIODE FMX-12SL 10A/200V TO-220	
	0M1G 930 8120	SCREW	
HS3	Q90G6264 5	HEAT SINK	
IC901	056G 379128	IC LD7576 GS SOP-8	
IC801	056G 608 12	IC ta9687GN-A-0-TR SOP-16	
Q802	057G 759 2	RK7002FD5T116 SOT-23 BY ROHM	
Q806	057G 763 91	ET AO4620 7.2A/30V -5.3A/-30V SOIC-8	
Q805	057G 763 91	ET AO4620 7.2A/30V -5.3A/-30V SOIC-8	
R926	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W	
R927	061G0603100 2F	RST CHIPR 10K OHM +-1% 1/10W	
R812	061G0603100 3F	RST CHIPR 100 KOHM +-1% 1/10W	
R806	061G0603100 3F	RST CHIPR 100 KOHM +-1% 1/10W	
R807	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	

R801	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W	
R813	061G0603104	RST CHIPR 100 KOHM +-5% 1/10W	
R841	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R840	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R839	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R838	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R809	061G0603105	RST CHIPR 1M OHM +-5% 1/10W	
R808	061G0603390 0F	RST CHIPR 390 OHM +-1% 1/10W	
R842	061G0603512	RST CHIPR 5.1 KOHM +-5% 1/10W	
R843	061G0603512	RST CHIPR 5.1 KOHM +-5% 1/10W	
R844	061G0603512	RST CHIPR 5.1 KOHM +-5% 1/10W	
R845	061G0603512	RST CHIPR 5.1 KOHM +-5% 1/10W	
R836	061G0603563	RST CHIPR 56 KOHM +-5% 1/10W	
R837	061G0603752	RST CHIPR 7.5 KOHM +-5% 1/10W	
R811	061G0603820 2F	RST CHIPR 82 KOHM +-1% 1/10W	
R810	061G0603820 2F	RST CHIPR 82 KOHM +-1% 1/10W	
R930	061G0603910 1F	RST CHIPR 9.1 KOHM +-1% 1/10W	
JR801	061G0805000	RST CHIP MAX 0R05 1/8W	
JR804	061G0805000	RST CHIP MAX 0R05 1/8W	
R848	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
JR903	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R846	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R847	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R924	061G0805101	1ST CHIPR 100 OHM +-5% 1/8W	
R939	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R925	061G0805102	RST CHIPR 1K OHM +-5% 1/8W	
R938	061G0805103	RST CHIPR 10K OHM +-5% 1/8W	
JR803	061G0805203 JF	RST CHIPR 20KOHM +-5% 1/8W FENGHUA	
R802	061G0805220	RST CHIPR 22 OHM +-5% 1/8W	
R943	061G0805471	RST CHIPR 470 OHM +-5% 1/8W	
R816	061G0805479	RST CHIP 4R7 1/8W 5%	
R819	061G0805479	RST CHIP 4R7 1/8W 5%	
R818	061G0805479	RST CHIP 4R7 1/8W 5%	
R817	061G0805479	RST CHIP 4R7 1/8W 5%	
R804	061G0805512	RST CHIPR 5.1 KOHM +-5% 1/8W	
R803	061G0805512	RST CHIPR 5.1 KOHM +-5% 1/8W	
R830	061G0805562 JF	RST CHIPR 5.6kOHM +-5% 1/8W FENGHUA	
JR802	061G1206000	RST CHIP MAX 0R05 1/4W	
JR901	061G1206000	RST CHIP MAX 0R05 1/4W	
JR902	061G1206000	RST CHIP MAX 0R05 1/4W	
FB902	061G12060004JT	RST CHIP MAX 0R05 1/4W TZAI YUAN	
R910	061G1206100	RST CHIPR 10 OHM +-5% 1/4W	
R918	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R919	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R920	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R935	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R949	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R950	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R951	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R961	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	
R962	061G1206101	RST CHIPR 100 OHM +-5% 1/4W	

R902	061G1206105	1M 1206	
R901	061G1206105	1M 1206	
R912	061G1206221	RST CHIPR 220 OHM +-5% 1/4W	
R909	061G1206339	RST CHIPR 3.3 OHM +-5% 1/4W	
R904	061G1206822	RST CHIPR 8.2 KOHM +-5% 1/4W	
R905	061G1206822	RST CHIPR 8.2 KOHM +-5% 1/4W	
C932	065G0603102 32	1000PF +-10% 50V X7R	
C814	065G0603221 31	CER1 0603 NP0 50V 220P P	
C805	065G0603223 32	CHIP 0.022UF 50V X7R 0603	
C810	065G0603332 32	CHIP 0.0033UF 50V X7R 0603	
C928	065G0805103 32	CAP CHIP 0805 10NF K 50V X7R	
C811	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C815	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C907	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C924	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C930	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C931	065G0805104 32	CAP CHIP 0805 0.1uF K 50V X7R	
C818	065G0805155A2K T	CAP CHIP 0805 1.5UF K 10V X7R	
C909	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO	
C809	065G080522131G F	CAP 0805 220PF 2% 50V NPO	
C806	065G080522512K T	CAP CHIP 0805 2.2UF K 16V X7R	
C808	065G0805333 32	CHIP 0.033UF 50V	
C940	065G0805473 32	CHIP 0.047UF 50V X7R	
C802	065G0805473 32	CHIP 0.047UF 50V X7R	
C801	065G0805473 32	CHIP 0.047UF 50V X7R	
C935	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
C929	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
C912	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R	
D808	093G 64 42 L	DIODE LBAV70LT1G SOT-23 LRC	
D807	093G 64 42 L	DIODE LBAV70LT1G SOT-23 LRC	
D806	093G 64 42 L	DIODE LBAV70LT1G SOT-23 LRC	
D803	093G 6433S	DIODE BAV99 SEMTECH	
ZD802	093G 39S 24 T	RLZ 5.6B LLDS	
ZD803	093G 39S 24 T	RLZ 5.6B LLDS	
	PW9D41MHD1AI	POWER BOARD FOR AI	
C503	065G0603104 12	CER2 0603 X7R 16V 100N P	
C501	065G0603509 31	CHIP 5PF +-0.5PF 50V NPO	
C502	065G0603509 31	CHIP 5PF +-0.5PF 50V NPO	
FB501	071G 56K121 M	CHIP BEAD	
	715G3501 2	USB BOARD PCB	
CN901	006G 31500	EYELET	
IC904	056G 158 10 T	IC AS431AZTR-E1 TO-92	
Q903	057G 530503 T	2SD1207T	
R903	061G152M10452T	RST MOFR 100KOHM +-5% 2WS	
R914	061G152M39852T	RST MOFR 0.39 OHM +-5% 2WS	
R828	061G211S62552T SY	MGFR 6.2MOHM 5% 1WS	
C906	065G 2K152 2T6921	CAP CER 1500pF K 2KV Y5P	
C908	067G215R2207KB	LOW ESR EC 22uF 50V M 6.3*11mm	
J806	071G 55 9 T	FERRITE BEAD	
FB901	071G 55 29	FERRITE BEAD	
F901	084G 56 4 B	FUSE 4A 250V	

F903	084G 56 4 B	FUSE 4A 250V	
ZD902	093G 39A0852T	GDZJ18B	
D900	093G 6026T52T	RECTIFIER DIODE FR107	
D901	093G 6038T52T	FR103	
D801	093G 6452452T	DIODE 1N4148-B4006 DO-35 SEMTECH	
D903	093G 6452452T	DIODE 1N4148-B4006 DO-35 SEMTECH	
J902	095G 90 23	JUMPER WIRE	
J901	095G 90 23	JUMPER WIRE	
J814	095G 90 23	JUMPER WIRE	
J813	095G 90 23	JUMPER WIRE	
J812	095G 90 23	JUMPER WIRE	
J811	095G 90 23	JUMPER WIRE	
J810	095G 90 23	JUMPER WIRE	
F902	095G 90 23	JUMPER WIRE	
L906	095G 90 23	JUMPER WIRE	
J915	095G 90 23	JUMPER WIRE	
J914	095G 90 23	JUMPER WIRE	
J913	095G 90 23	JUMPER WIRE	
J912	095G 90 23	JUMPER WIRE	
J911	095G 90 23	JUMPER WIRE	
J910	095G 90 23	JUMPER WIRE	
J909	095G 90 23	JUMPER WIRE	
J908	095G 90 23	JUMPER WIRE	
J907	095G 90 23	JUMPER WIRE	
J906	095G 90 23	JUMPER WIRE	
J905	095G 90 23	JUMPER WIRE	
J904	095G 90 23	JUMPER WIRE	
J903	095G 90 23	JUMPER WIRE	
J801	095G 90 23	JUMPER WIRE	
J803	095G 90 23	JUMPER WIRE	
J804	095G 90 23	JUMPER WIRE	
J805	095G 90 23	JUMPER WIRE	
J807	095G 90 23	JUMPER WIRE	
J808	095G 90 23	JUMPER WIRE	
J809	095G 90 23	JUMPER WIRE	
	715G2824 1 11	POWER BOARD PCB	